

# HCD-D260/N250

## SERVICE MANUAL



Photo : HCD-D260

*US Model*  
HCD-D260

*Canadian Model*

*AEP Model*

*E Model*

*Australian Model*

*PX Model*  
HCD-N250

HCD-D260 and HCD-N250 are the tuner, deck, CD and amplifier section in LBT-D260, LBT-N250 and LBT-N250P.

CD SECTION	Model Name Using Similer Mechanism	NEW
	CD Mechanism Type	CDM16Q1-5BD19
	Base Unit Type	BU-5BD19
	Optical Pick-up Type	KSS-213BA
TAPE DECK SECTION	Model Name Using Similer Mechanism	HCD-A190
	Tape Transport Mechanism Type	TCM-180VW-H14

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS (US)

##### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 70 - 20,000 Hz; rated 50 watts per channel minimum RMS power, with no more than 0.9 % total harmonic distortion from 250 milliwatts to rated output.

#### CD player section

System Compact disc digital audio system  
Laser Semiconductor laser  
Wavelength 780 - 790 nm

#### Tuner section

FM stereo, FM/AM superheterodyne tuner

#### FM tuner section

Tuning range 87.5 - 108.0 MHz  
Antenna FM wire antenna  
Antenna terminals 75 ohm unbalanced  
Intermediate frequency 10.7 MHz

— Continued on next page —

COMPACT DISC DECK RECEIVER  
**SONY®**



### AM tuner section

#### Tuning range

- AM: 530 – 1,710 kHz (US, CND, AR, MX)  
(with the AM tuning interval set at 10 kHz)  
531 – 1,602 kHz (E, PX)  
(with the AM tuning interval set at 9 kHz)  
531–1,602 kHz (G, IT)
- MW: 531–1,602 kHz (AEP)
- LW: 153–279 kHz (AEP)  
(with the LW tuning interval set at 3 kHz)
- Antenna AM loop antenna  
External antenna terminals
- Intermediate frequency 450 kHz

### Cassette deck section

#### Recording system

4-track 2-channel stereo

#### Frequency response

(DOLBY NR OFF)  
40 – 13,000 Hz (±3 dB), using  
SONY TYPE I cassette  
40 – 14,000 Hz (±3 dB), using  
SONY TYPE II cassette

#### Wow and flutter

0.1% (WRMS) (US, CND, Other)  
±0.2% (DIN) (AEP, G, IT)

### Amplifier section

#### Continuous RMS power output:

55 W + 55 W (6 ohms at 1 kHz,  
5% THD) (US)  
25 W + 25 W (6 ohms at 1 kHz,  
5% THD) (CND, AEP, G, IT)  
35 W + 35 W (6 ohms at 1 kHz,  
5% THD) (Other)

#### Inputs

##### PHONO (phono jack) (Except AUS) :

Sensitivity 3 mV, impedance  
47 kilohms

##### VIDEO (phono jack) (AUS only) :

Sensitivity 300 mV,  
impedance 47 kilohms

### General

#### Power requirements

120 V AC, 60 Hz (US, CND)  
220–230 V AC, 50/60 Hz (AEP, G, IT)  
120 V AC, 50/60 Hz (MX)  
220–240 V AC, 50/60 Hz (AUS, AR)  
110–120 V or 220–240 V AC  
adjustable, 50/60 Hz (Other)

#### Power consumption

110 W (US)  
70 W (CND, AEP, G, IT)  
95 W (Other)

#### Dimensions

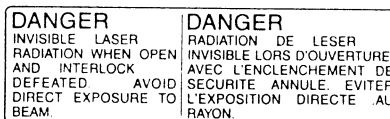
Approx. 355 × 425 × 405 mm  
(14 × 16 3/4 × 16 inches) (w/h/d)  
incl. projecting parts and controls

Mass Approx. 10.5 kg (23 lb 2 oz)

Design and specifications subject to change without notice.

### Abbreviations

CND : Canadian model  
G : German model  
IT : Italian model  
AUS : Australian model  
MX : Mexican model  
AR : Argentine model



This caution label is located inside of the unit.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.


Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT  
LUOKAN 1 LASERLAITE  
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

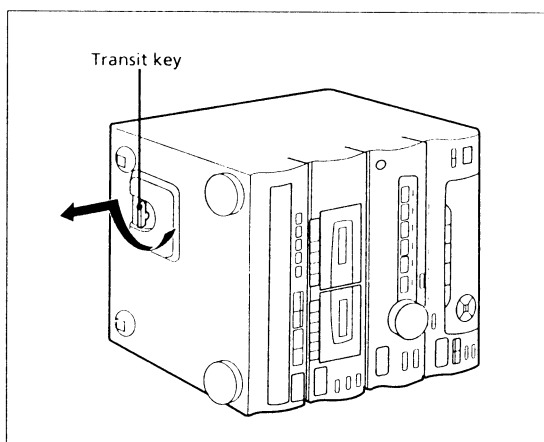
CAUTION	: INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM
ADVARSEL	: USYNLIG LASERSTRÅLING VED ÅBNING NÅR SÆKKEPHØDSÅFTRYKKERE ER UDE AF FUNKTION UNNGÅ UDSTRÆLTSE FOR STRÅLING
VARO!	: AVATTAS SÄÄJÄ SUOJALUKITUS OHITETTAI SÄÄ O ETÄLTÄÄN LASERSÄTELYLLE
VARNING	: LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD
ADVARSEL	: USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN

This caution label is located inside the unit.


\* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

### Before operating the unit

Remove the transit key on the bottom of the unit by following the instructions on the label, and keep it in a safe place. The transit key protects the optical system against shock during transportation.



### To re-install the transit key when transporting the unit

- 1 Remove all CDs.
- 2 Press  OPEN/CLOSE to close the disc tray and confirm that "O" (or "D", "D...") has disappeared from the display.
- 3 Turn off the power.
- 4 Insert the transit key into its hole to lock.

### Notes on chip component replacement

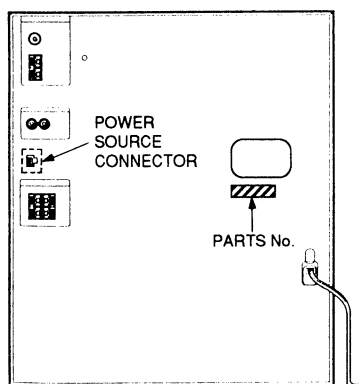
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

### MODEL IDENTIFICATION

— BACK PANEL —



	PARTS NO	NOTE
US Model	4-969-782-0□	
Canadian Model	4-969-782-1□	
AEP 2 Model	4-969-782-4□	WITH POWER SOURCE CONNECTOR for PS-LX56P
AEP 1 Model	4-969-782-6□	
Italian Model	4-969-782-8□	
German Model	4-969-782-9□	
E Model	4-970-161-0□	WITH POWER SOURCE CONNECTOR for PS-LX56P
Argentine Model	4-970-161-1□	
Australian Model	4-970-161-2□	
Mexican Model	4-970-161-3□	WITH POWER SOURCE CONNECTOR for PS-LX56P
PX Model	4-970-161-4□	

### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK  $\Delta$  OR DOTTED LINE WITH MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

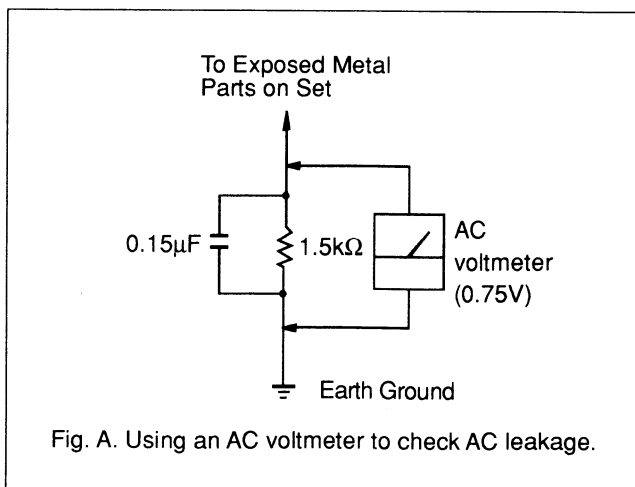


Fig. A. Using an AC voltmeter to check AC leakage.

### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\Delta$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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## SECTION 1 SERVICING NOTE

### NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

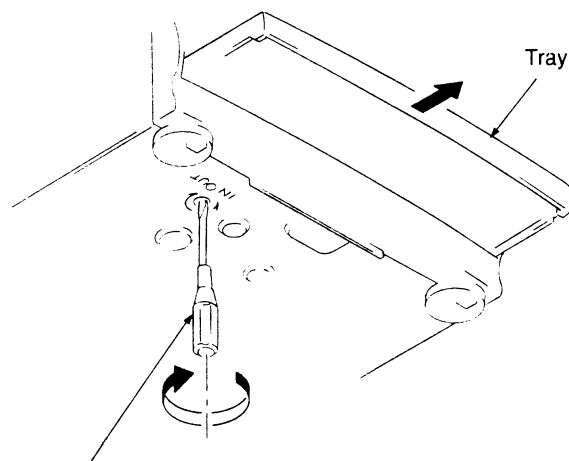
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

### HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF



Insert a tapering driver into the aperture of the unit bottom, and turn in the direction of arrow (to OUT direction).

\* To close the disc tray, turn the driver in the reverse direction (to IN direction).

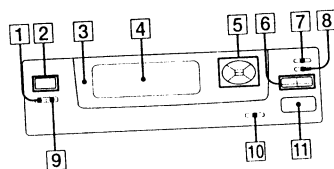


## Index to Parts and Controls

Refer to the pages indicated in parentheses for details on how to use the controls.

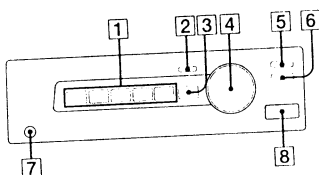
### Front Panel

#### Tuner section



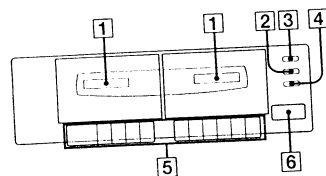
- 1 CLOCK SET button (6)
- 2 SYSTEM POWER switch (7)
- 3 Remote sensor
- 4 Display window (22)
- 5 CURSOR CONTROL buttons (6, 17)
- 6 TUNING (+/-) buttons (11)
- 7 TUNING MEMORY button (12)
- 8 TUNING MODE button (11)
- 9 CLOCK ENTER/NEXT button (6)
- 10 DISPLAY button (6, 9, 17)
- 11 TUNER/BAND button (11, 15)

#### Amplifier section



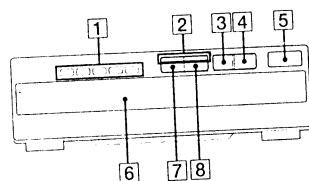
- 1 Preset equalizer setting buttons (16)
- 2 EQ MEMORY button (17)
- 3 P. FILE button (16, 17)
- 4 VOLUME control (8, 16)
- 5 DBFB button (16)
- 6 SURROUND button (17)
- 7 PHONES jack (18)
- 8 PHONO button (7, 18) (EXCEPT AUS)
- 9 VIDEO button (AUS)

### Tape player section



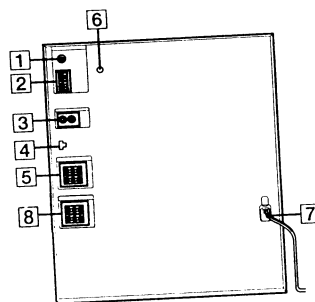
- 1 Cassette compartments (13)
- 2 TAPE SELECT selector (13)
- 3 DOLBY NR selector (14)
- 4 DUBBING SPEED selector (15)
- 5 Tape operating buttons
  - ▷ (play) (13)
  - ▶▶ (fast rightward) (13)
  - ◀◀ (fast leftward) (13)
  - /▲ (stop/eject) (13)
  - RFC (recording) (for deck B only) (14)
  - ⏸ PAUSE button (13)
- 6 TAPE button (13)

### CD player section



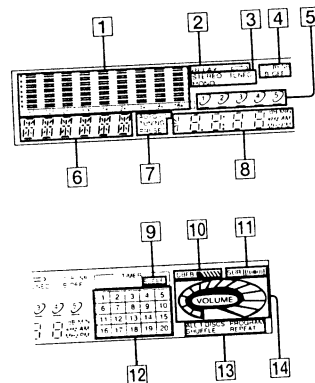
- 1 DISC SELECT 1 - 5 buttons (8)
- 2 ◀◀◀/▶▶▶ (AMS) buttons (8, 14)
- 3 DISC SKIP button (8)
- 4 ◀ OPEN/CLOSE button (8, 14)
- 5 CD ▶▶▶ (play) button (8, 14)
- 6 Disc tray (8)
- 7 ⏸ (pause) button (8)
- 8 ■ (stop) button (8)

### Rear Panel



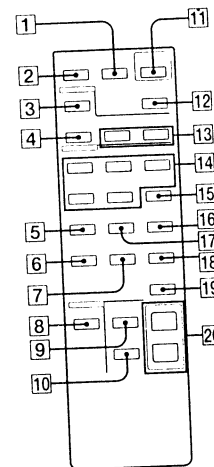
- 1 FM 75Ω terminal (4)
- 2 AM terminal (4)
- 3 PHONO IN jacks (4) (EXCEPT AUS)
- 4 VIDEO IN jack (AUS)
- 5 POWER SOURCE terminal (4)
- 6 SPEAKER connectors (4)
- 7 ⚡ ground terminal (4)
- 8 AC power cord (5)
- 9 SURROUND SPEAKER connectors (E, MX, AR, AUS, PX)

### Display Window



- 1 Spectrum analyzer (17)
- 2 RELAY indications (13)
- 3 Tuner indication (11)
- 4 DOLBY NR indications (13)
- 5 Disc calendar (8)
- 6 Band/disc/track indications (8, 11, 14)
- 7 AUTO/TUNING/PRESET/STEP indication (11)
- 8 Frequency/playing time indications (8, 12, 14)
- 9 SLEEP indications (18)
- 10 DBFB indication (16)
- 11 SURROUND indication (17)
- 12 Music calendar (8, 14)
- 13 CD play mode indication (8)
- 14 VOLUME indication (8)

### Remote



- 1 DISPLAY button (6, 9, 17)
- 2 FUNCTION button (8, 14)
- 3 BAND button (11)
- 4 STEREO/MONO button (15)
- 5 CONTINUE button (8)
- 6 CHECK button (10)
- 7 CLEAR button (10, 15)
- 8 TAPE button (13)
- 9 PRESET EQ button (16)
- 10 P. FILE button (17)
- 11 SYSTEM POWER button (7)
- 12 SLEEP button (18)
- 13 PRESET (+/-) buttons (12)
- 14 CD operating buttons
  - ▶▶▶ (play) (10)
  - ◀◀/▶▶▶ AMS\* (10)
  - ⏸ (pause) (10)
  - (stop) (10)
- \* AMS: Automatic Music Sensor
- 15 REPEAT button (10)
- 16 PROGRAM button (10)
- 17 SHUFFLE button (9)
- 18 EDIT button (14)
- 19 DISC SKIP button (10)
- 20 VOL. (volume) buttons (8, 16)

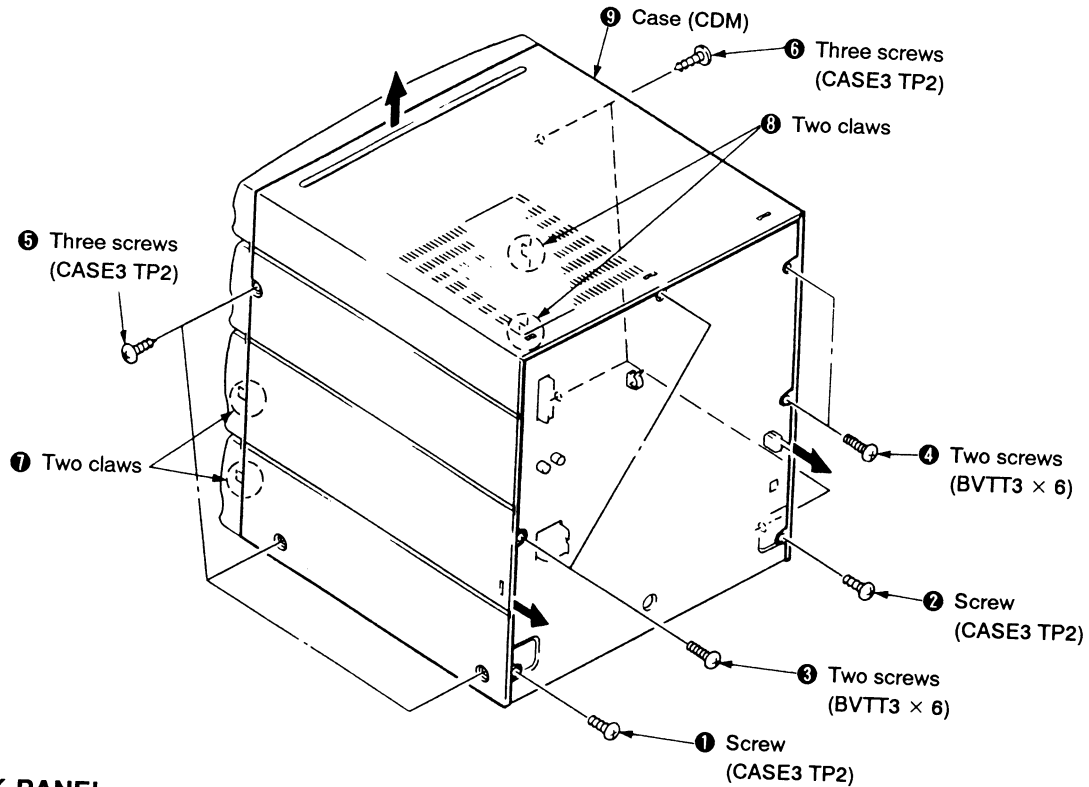
## SECTION 2 GENERAL

This section is extracted from instruction manual.

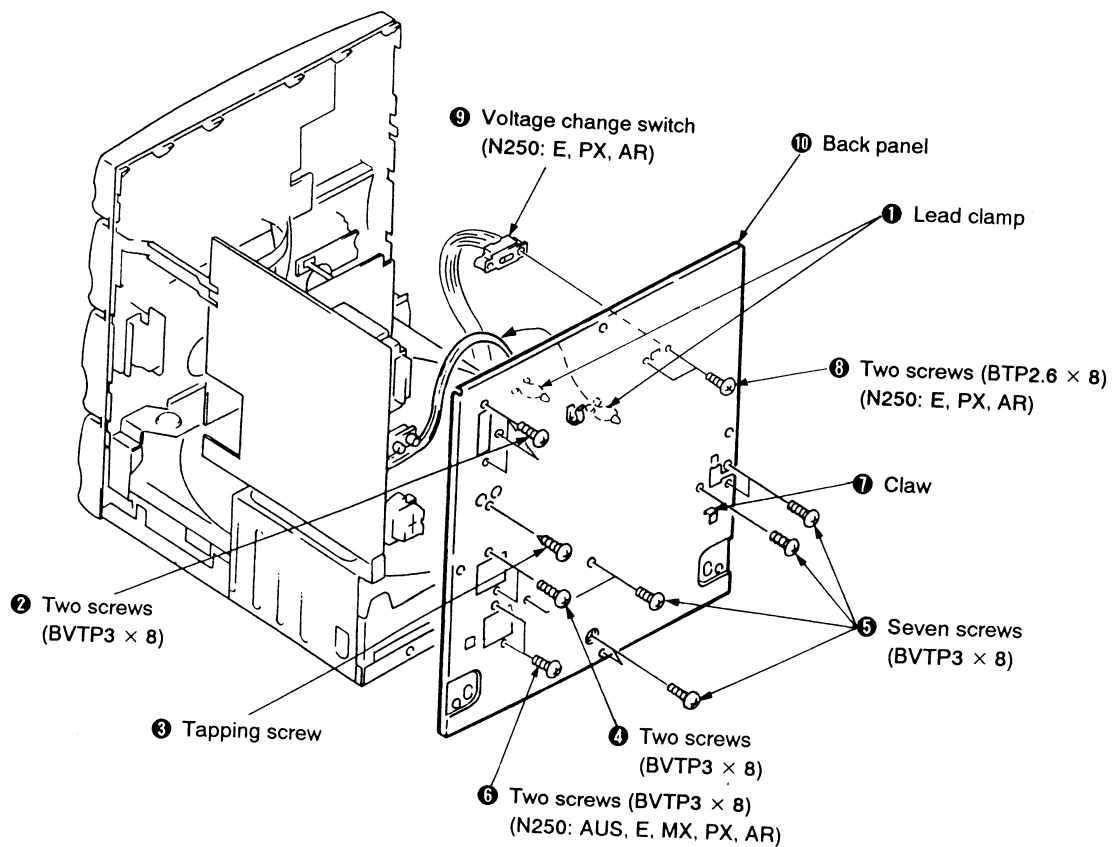
**Abbreviations**  
 AUS : Australian model  
 MX : Mexican model  
 AR : Argentine model

## SECTION 3 DISASSEMBLY

### 3-1. CASE (CDM)

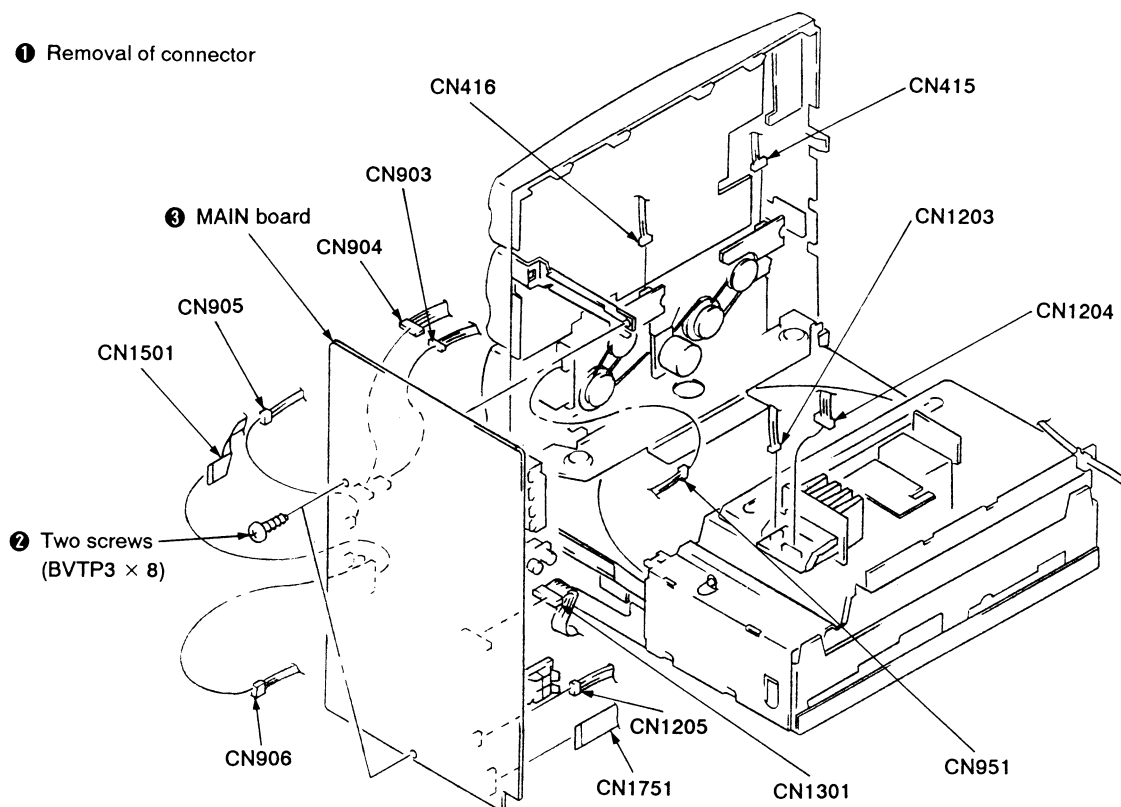


### 3-2. BACK PANEL

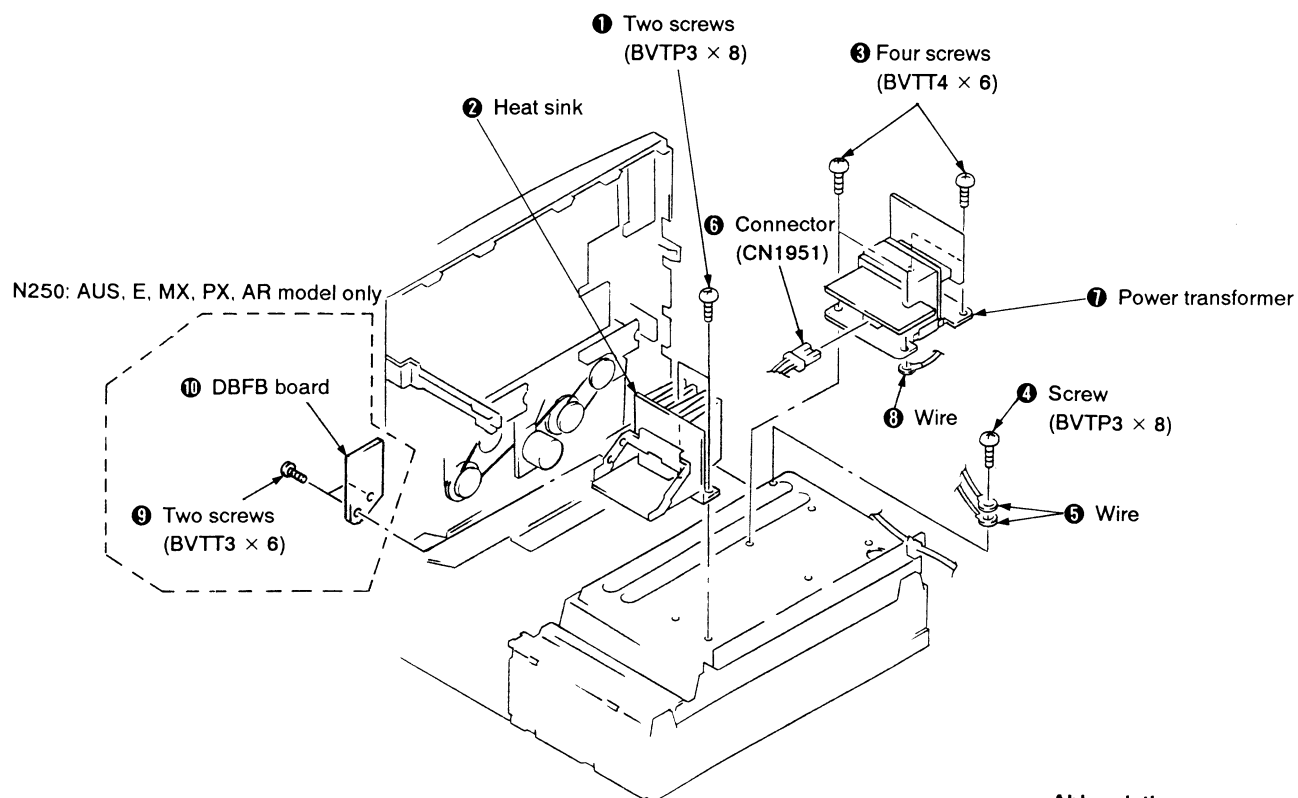


### 3-3. MAIN BOARD

#### ① Removal of connector



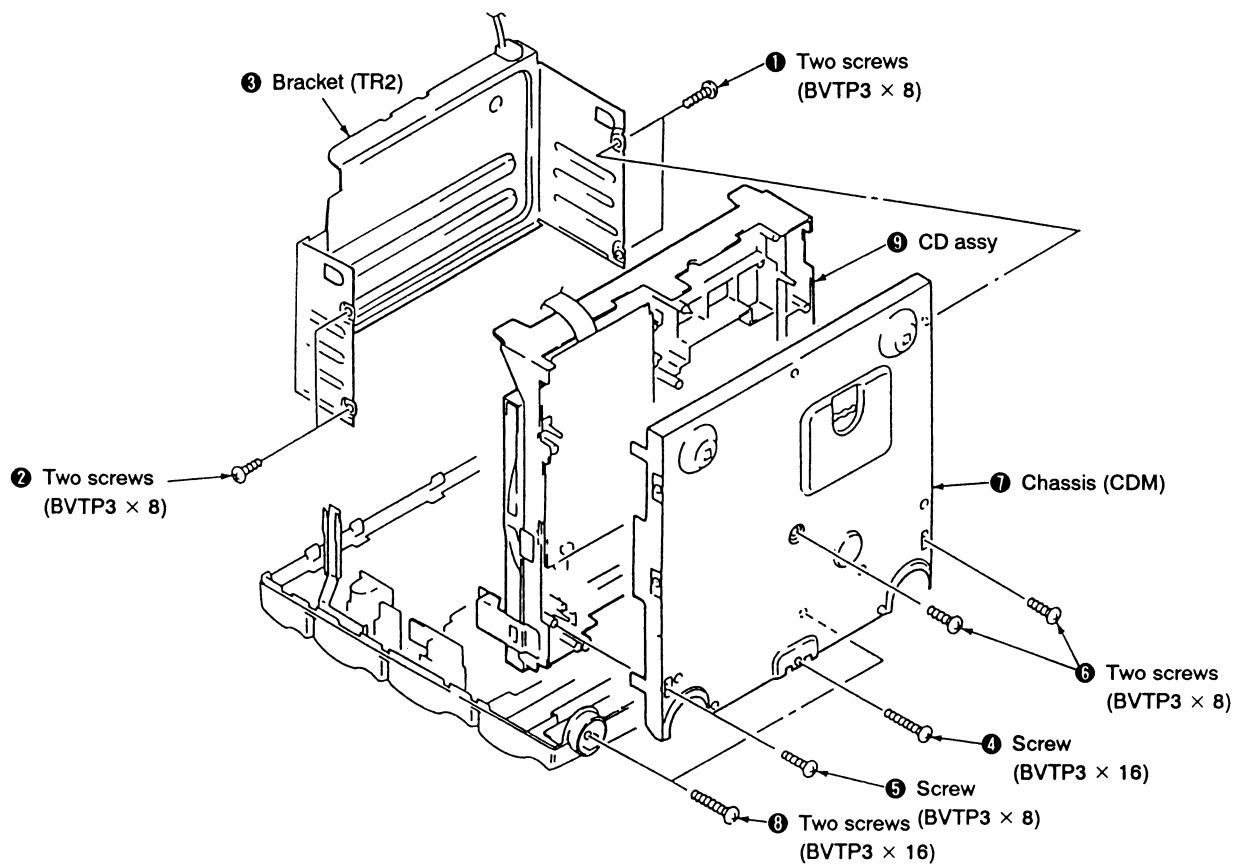
### 3-4. POWER TRANSFORMER



#### • Abbreviations

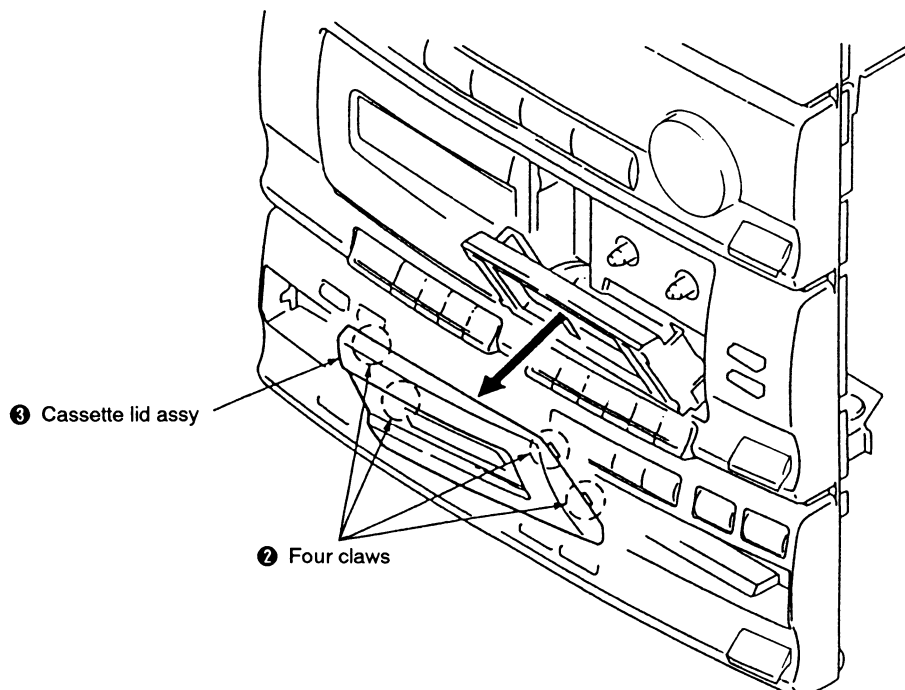
AUS: Australian model  
 MX : Mexican model  
 AR : Argentine model

### 3-5. CD ASSY



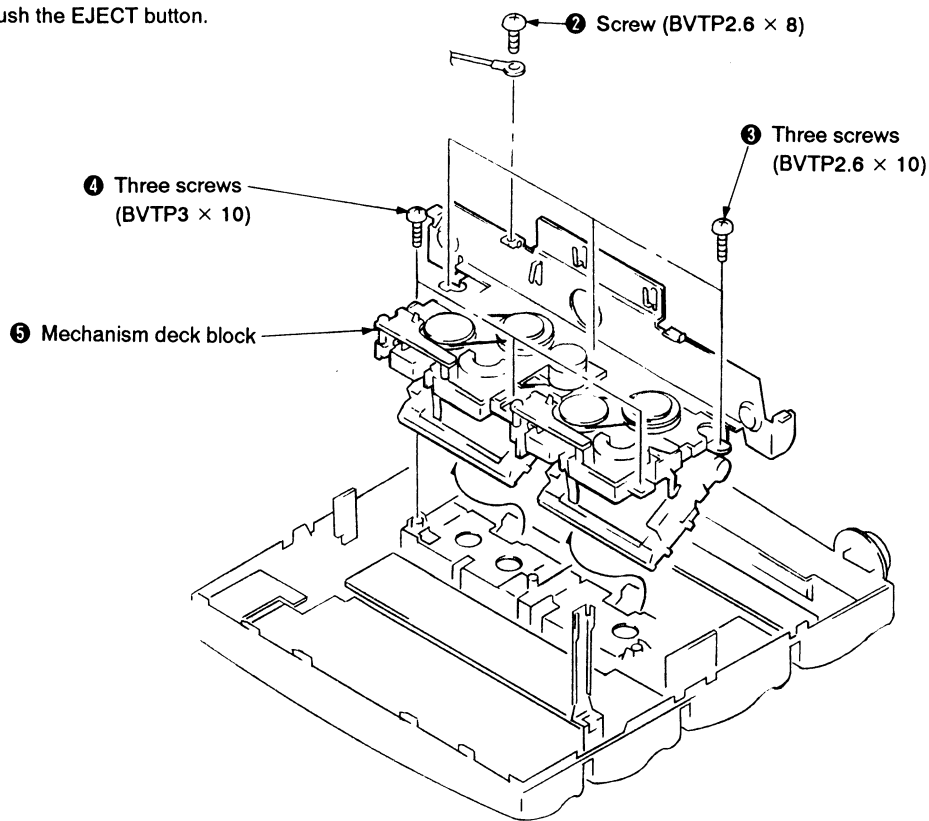
### 3-6. CASSETTE LID ASSY

- 1 Push the EJECT button.

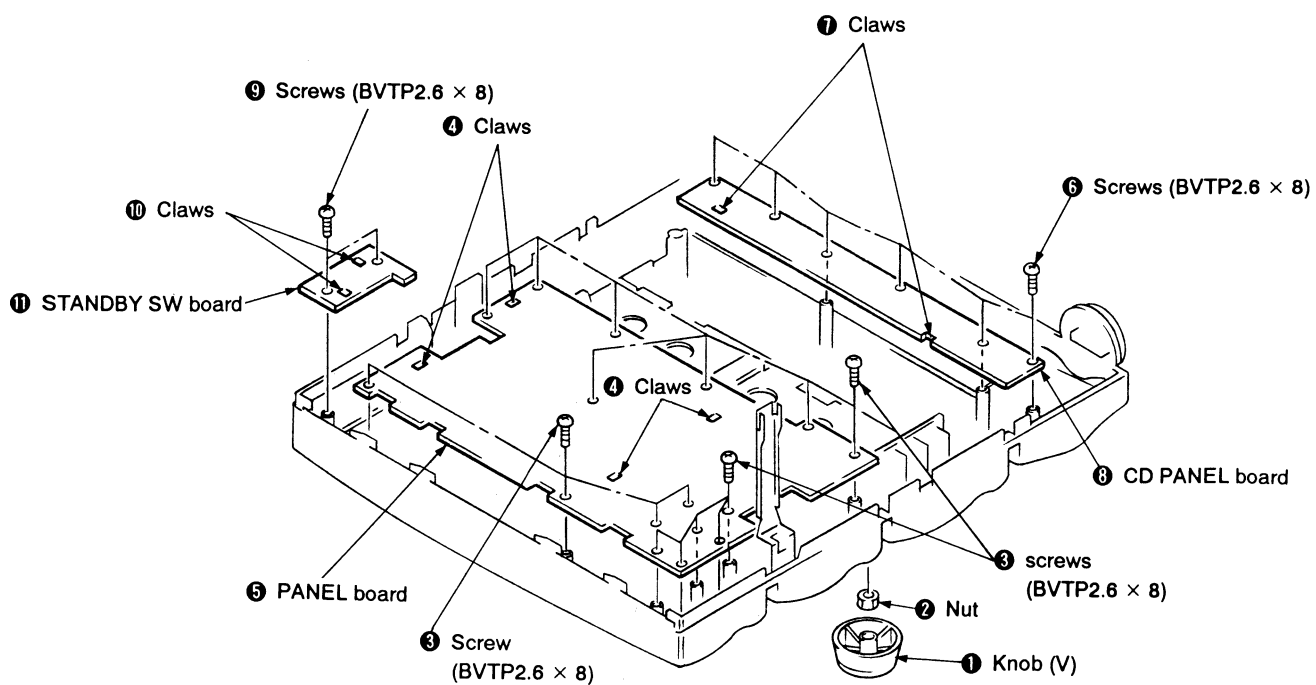


### 3-7. MECHANISM DECK BLOCK

- ① Push the EJECT button.

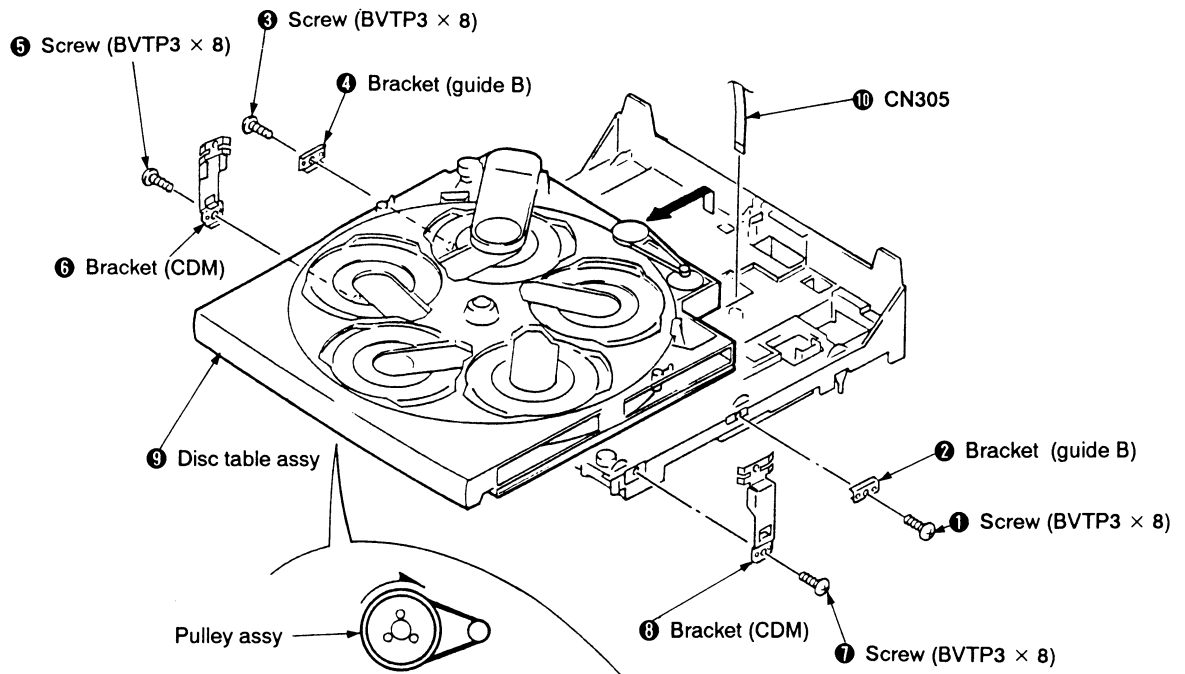


### 3-8. PANEL BOARD



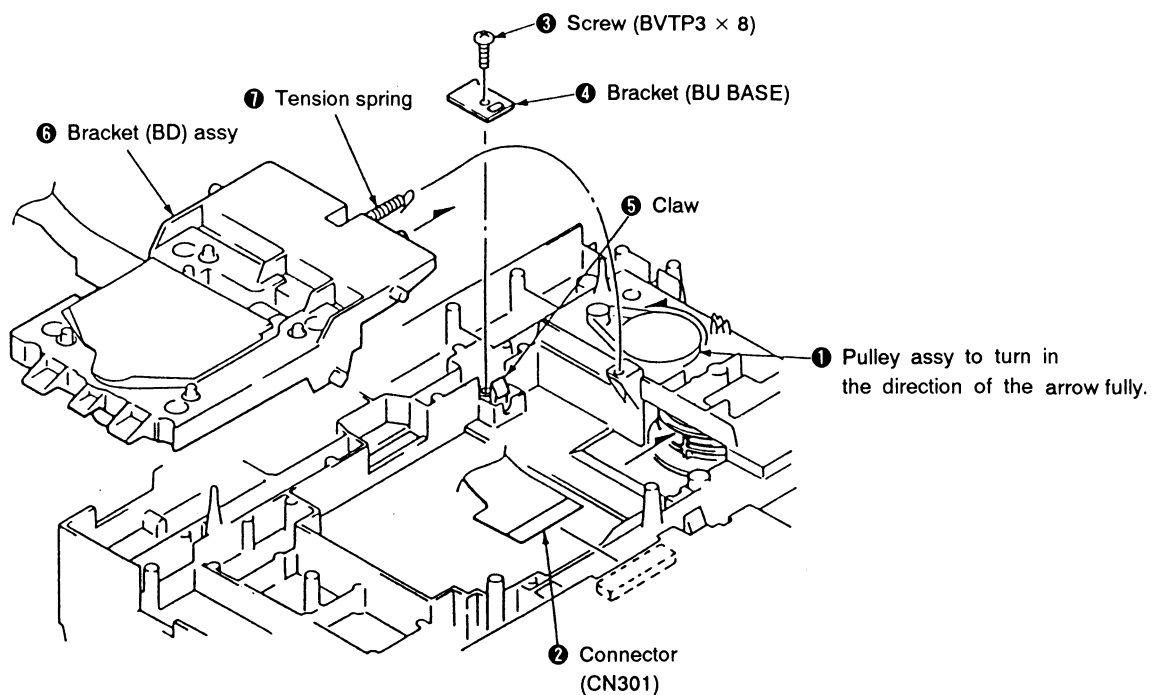
### 3-9. DISC TABLE ASSY

**Note on assembly** : Turn the pulley assy in the direction of the arrow.  
Down the bracket (BD) assy, and assembly the disc table assy.



### 3-10. BRACKET (BD) ASSY

**Note on assembly** : Set to the arrow portion of gear (loading A) for shaft (CAM).



## SECTION 4 MECHANICAL ADJUSTMENTS

### PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
 

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30—70g•cm (0.42—0.97oz•inch)
FWD Back tension	CQ-102C	1.5—5.5g•cm (0.020—0.076oz•inch)
FF/REW	CQ-201B	63g•cm or more (0.87oz•inch or more)

## SECTION 5 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB=0.775V

1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-ch.

- Switches and controls should be set as follows unless otherwise specified.

TAPE SELECT switch : TAPE I

DOLBY NR switch : OFF

Type	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

### Record/Playback Head Azimuth Adjustment

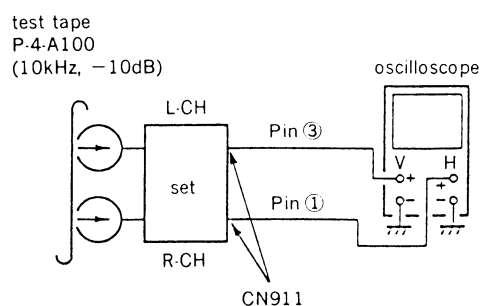
DECK A

DECK B

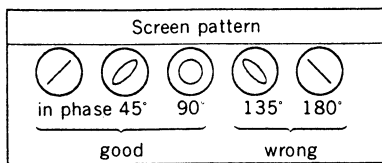
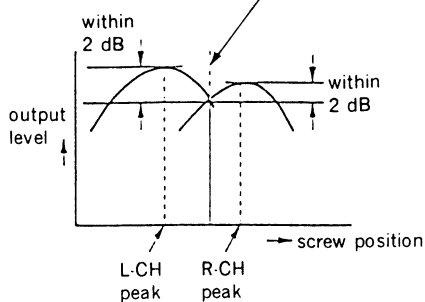
**Note :** Perform this adjustments for both decks.

#### Procedure :

1. Mode : Playback

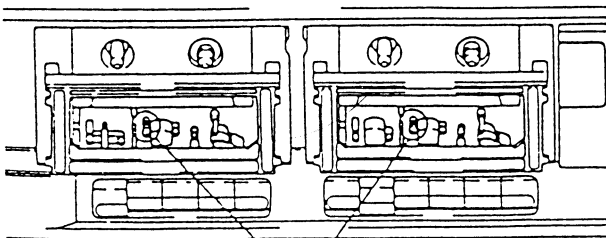


- Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 2 dB of peak.



- After the adjustments, apply suitable locking compound to the parts adjusted.

#### Adjustment Location :

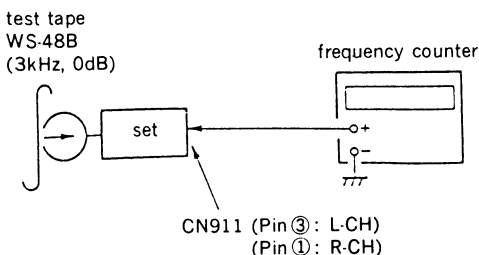


Adjustment screws  
REC/PB head (deck B)  
or PB head (deck A)

#### Tape Speed Adjustment DECK A DECK B

##### Procedure :

Mode : Playback



##### High speed adjustment (Must be first Adjustment deck B)

- Short pin ① and ③ of CN912 on set "DUBBING SPEED" switch to "HIGH". Then at HIGH speed mode.
- Adjust RV901 so that the frequency counter reads  $6,000 \pm 20$  Hz.

##### Normal speed adjustment

- Remove the short pin from CN912 on set "DUBBING SPEED" switch to "NORMAL". Then at NORMAL speed mode.
- Adjust RV902 so that the frequency counter reads  $3,000 \pm 10$  Hz.

Frequency difference between deck A and deck B the beginning of the tape should be within  $\pm 1\%$ .

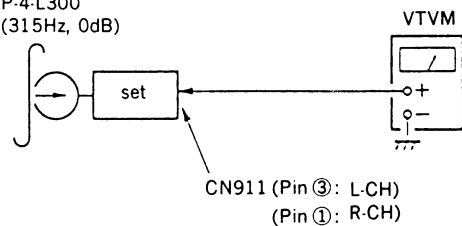
Adjustment Location : main board

#### Playback Level Adjustment DECK A DECK B

##### Procedure :

Mode : Playback

test tape  
P-4-L300  
(315Hz, 0dB)



Deck A side RV702 (L-CH), RV802 (R-CH)

Deck B side RV701 (L-CH), RV801 (R-CH)

so that the limits below are satisfied.

##### Adjustable limits :

CN911 PB level: 301.5 to 338.3 mV ( $-8.2$  to  $-7.2$  dB)

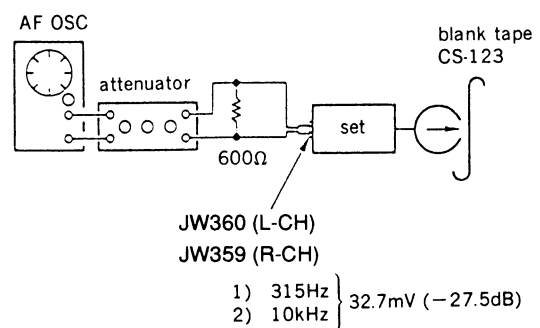
level difference between the channels: within  $\pm 1$  dB

Adjust Location : main board

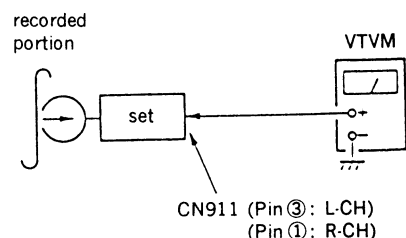
#### Record Bias Current Adjustment DECK B

##### Procedure :

- Mode : record



- Mode : Playback





Confirm playback the signal recorded in step 1 become adjustable limits as follows.  
If these levels do not adjustable limits, adjustment the RV704 (L-CH) and RV804 (R-CH) to repeat steps 1 and 2.

**Adjustable limits :** Playback output of 315 Hz to playback output of 10 kHz :  $0 \pm 0.5$  dB

**Adjustment Location :** main board

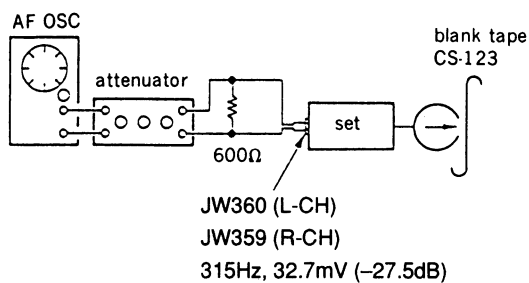
### Record Level Adjustment **DECK B**

**Setting :**

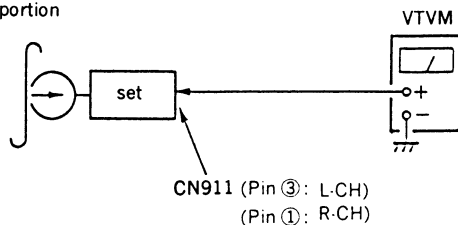
TAPE SELECT switch : TYPE I

**Procedure :**

1. Mode: record



2. Mode: Playback  
recorded  
portion



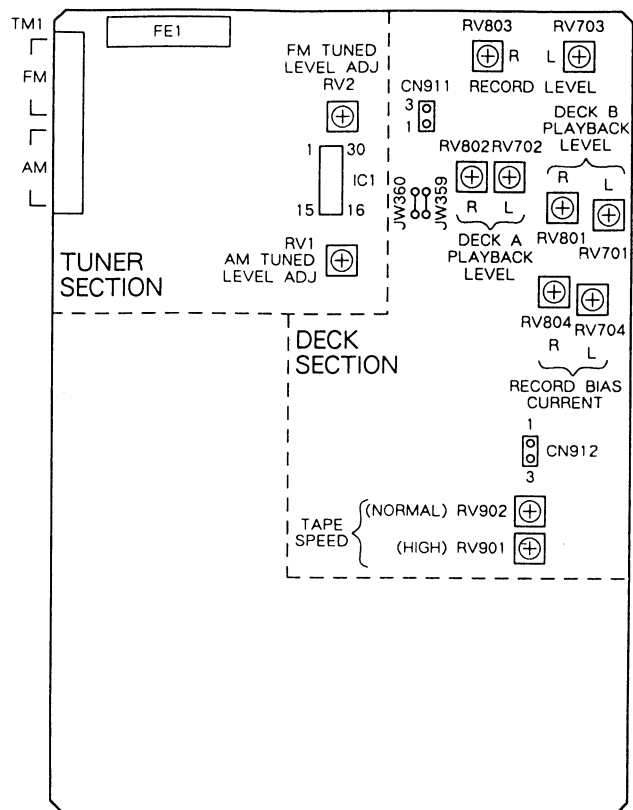
Confirm playback the signal recorded in step 1 become adjustable limits as follows.  
If these levels do not adjustable limits, adjustment the RV703 (L-CH) and RV803 (R-CH) to repeat steps 1 and 2.

**Adjustable limits :**

CN911 PB level: 23.1 to 26.0 mV ( $-30.5$  to  $-29.5$  dB)

**Adjustment Location :** main board

**[MAIN BOARD] (Component Side)**

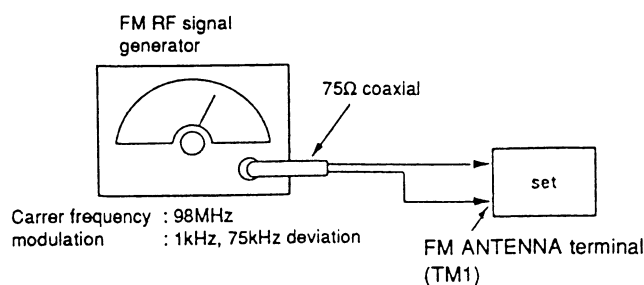


## TUNER SECTION $0dB=1\mu V$

**Note** : As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

### FM Section Adjustment

Setting :



### FM Tuned Level Adjustment

Band : FM

**Procedure :**

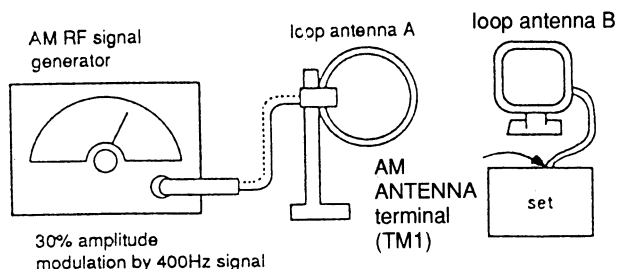
1. Supply a  $17.8 \mu V$  (25dBμ) 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

**Adjustment Location** : main board

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by trimmer capacitors.

### AM Section Adjustment

Setting :



### AM Tuner Level Adjustment

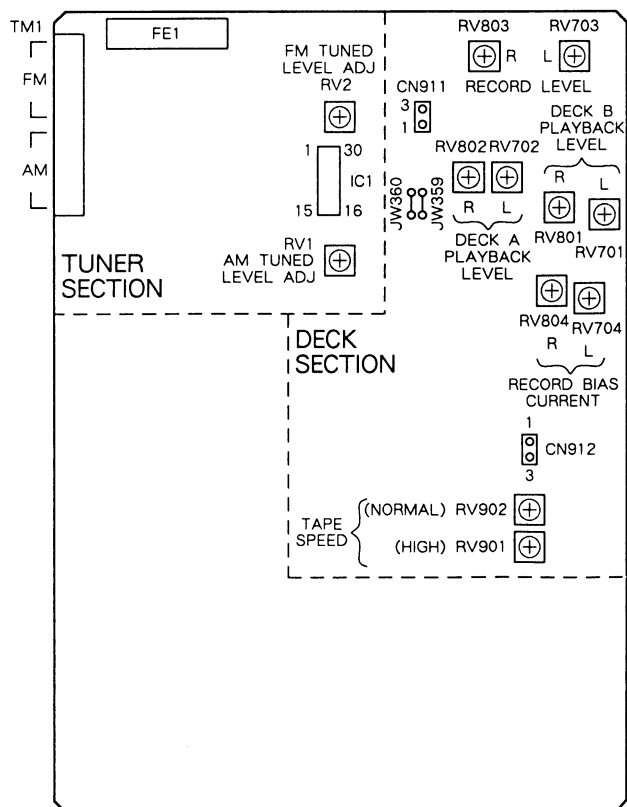
Band : AM

**Procedure :**

1. Set loop antenna A so that the loop antenna B input level becomes 0.56 mV (55 dBμ).
2. Tune the set to 1050kHz.
3. Adjust RV1 so that the TUNED indicator goes on.

**Adjustment Location** : main board

**[MAIN BOARD]** (Component Side)

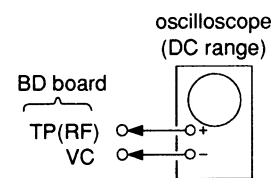


## CD SECTION

### Note :

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than  $10M\Omega$  impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

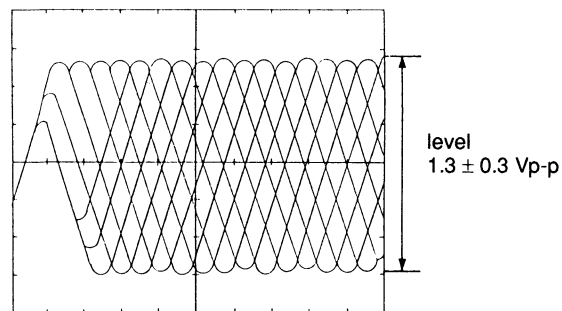
### Focus Bias Adjustment



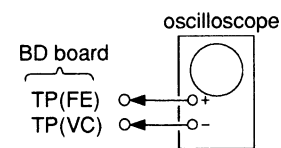
### Procedure:

1. Connect oscilloscope to test point TP (RF). (GND terminal : VC)
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Adjust RV101 so that the waveform is clear.  
(Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.)
5. After adjustment, check the RF signal level.

• RF signal  
VOLT/DIV : 200 mV  
TIME/DIV : 500 nS



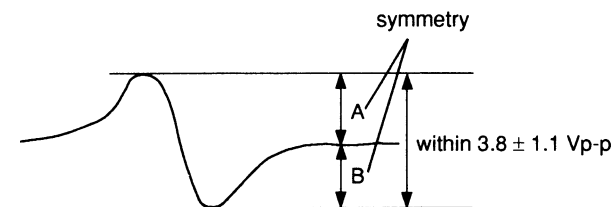
### S Curve Check



### Procedure :

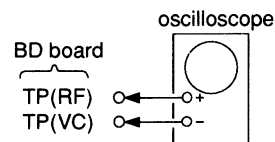
1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within  $3.8 \pm 1.1$  Vp-p.

S-curve waveform



6. After check, remove the lead wire connected in step 2.
- Note :**
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
  - Take sweep time as long as possible and light up the brightness to obtain best waveform.

### RF Level Check



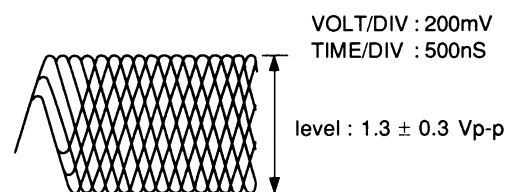
### Procedure :

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

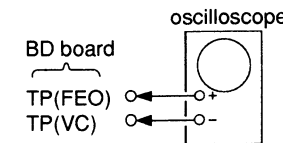
### Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

RF signal waveform



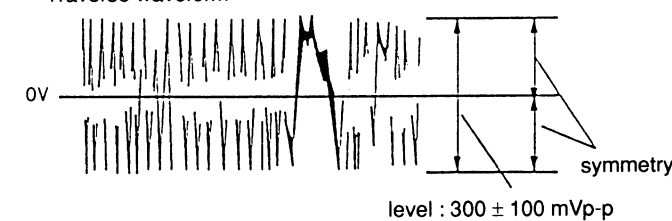
### E-F Balance Check



### Procedure :

1. Connect pin ⑤ of IC101 to GND with a lead wire.
2. Connect oscilloscope to test point TP (TEO).
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.

Traverse waveform



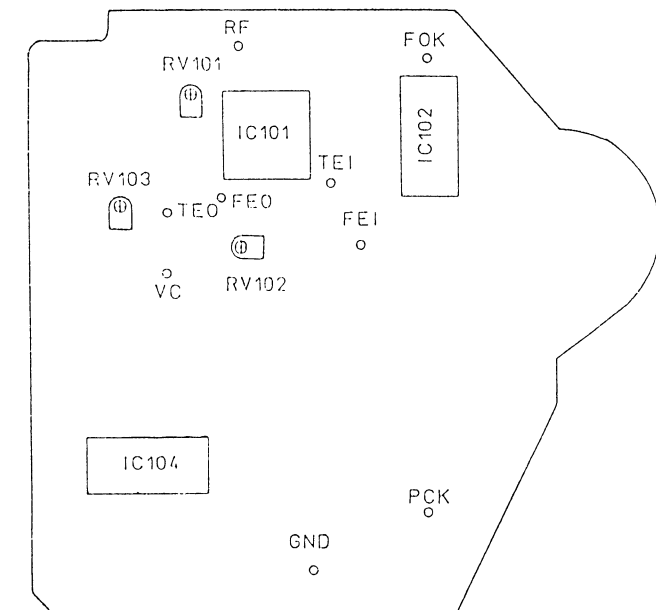
6. Remove the lead wire connected in step 1.

### Focus/Tracking Gain Adjustment (RV102, RV103)

This gain has a margin, so even if it is slightly off. There is no problem. Therefore, do not perform this adjustment. Please note that it should be fixed to mechanical center position when you moved and do not know original position.

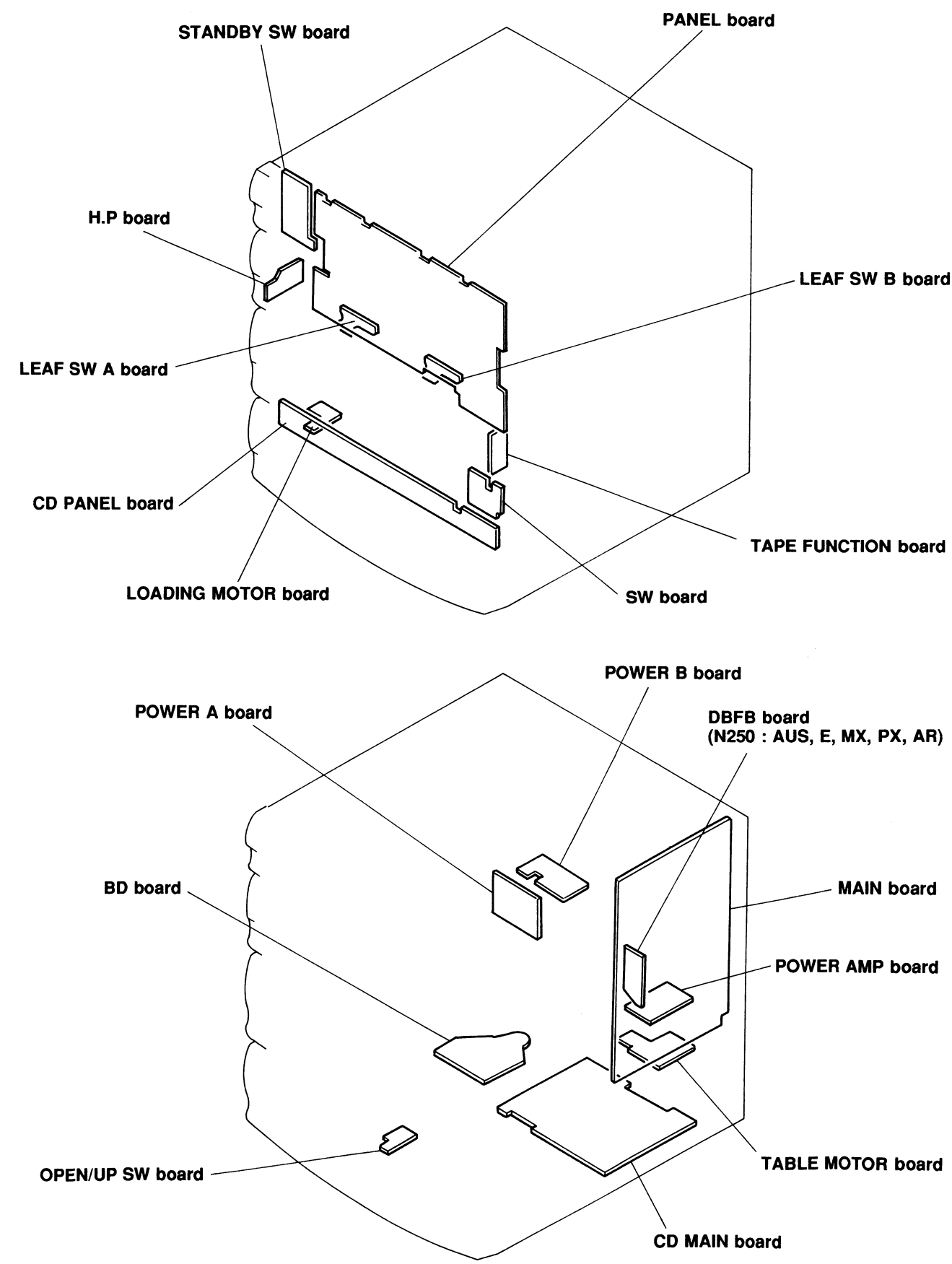
### Adjustment Location :

### [ BD BOARD ] (Conductor Side)



SECTION 6  
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION



6-2. IC PIN FUNCTIONS

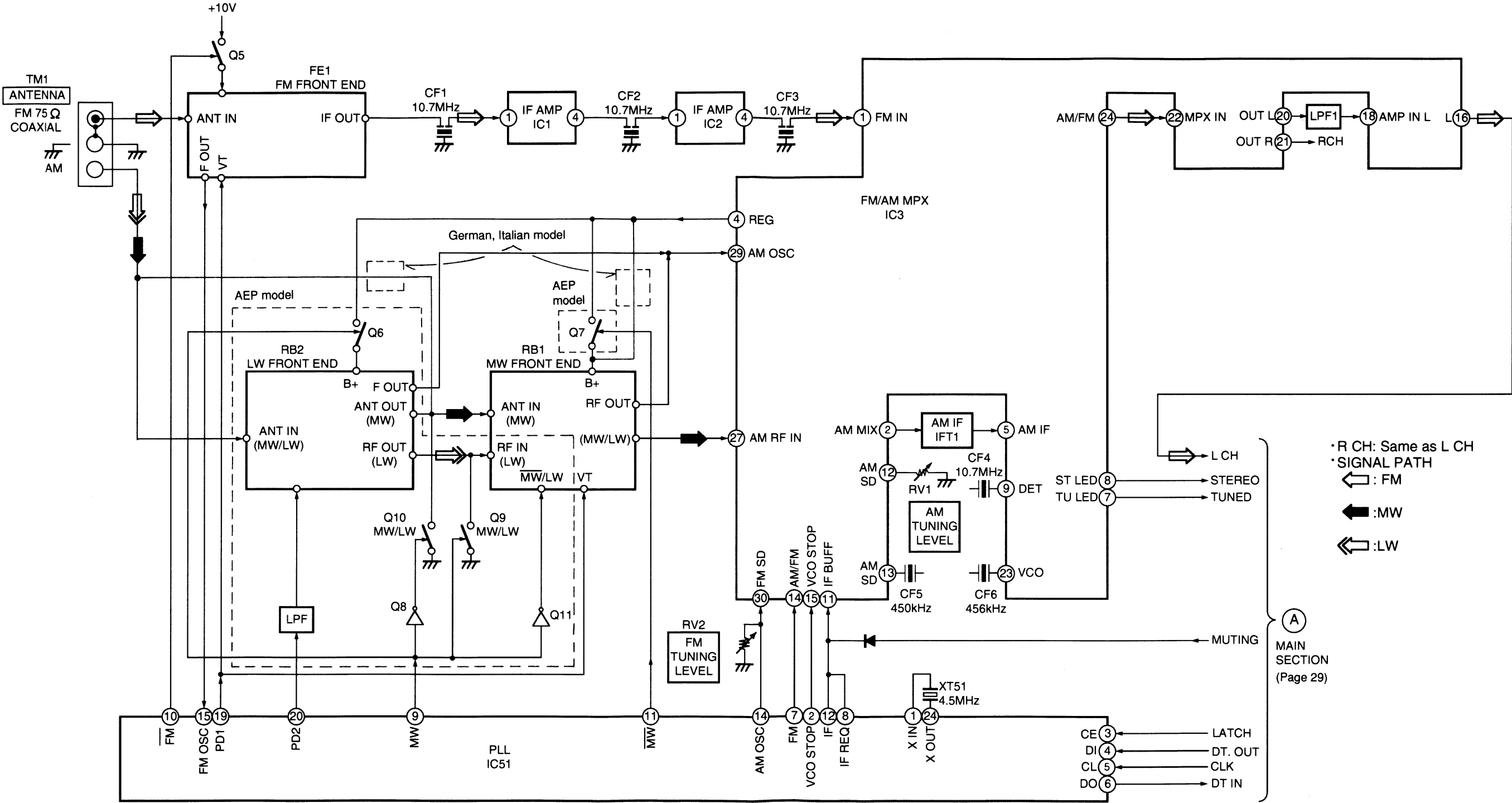
• IC1501 MASTER CONTROL (TMP87CP64F-6254)

Pin No.	Pin Name	I/O	Function
1	Vss	I/O	GND
2	XOUT	—	} X'tal (8MHz).
3	XIN	I	
4	RESET	I	Reset signal input.
5	XOUT	O	} X'tal for clock (32.768kHz)
6	XIN	I	
7	GND (test)	—	GND
8	AC CUT	I	AC detect signal input.
9	COUNT SW	I	} Not used.
10	INIT SW	I	
11	DISC SENS	I	
12	MID SENS	I	
13	CD XRST	O	Reset signal output for CD.
14	POWER ON	O	Power on signal output.
15	MUTE (TA)	O	Mute signal for AMP.
16	MPX ON	O	} Not used.
17	KEY CON LATCH	O	
18	VOL LATCH	O	Latch signal for electrical volume.
19	K-CON	O	} Not used.
20	K-PON B	O	
21	FUNC A	O	} Input selector control signal output.
22	FUNC B	O	
23	FUNC C	O	Not used.
24	GEQ. LATCH	O	Latch signal for graphic equalizer
25	RDS INT	I	Not used. (Pull up)
26	SCOR	I	Sub-code sync signal input.
27	SENS	I	Table sence signal input.
28	CD POWER	O	CD power control signal output.
29	CD. G-LATCH	O	Not used.
30	DBFB1-2	O	DBFB switching signal output.
31	ST-MUT	O	Mute signal output for tuner.
32	ST-CE	O	Latch signal output for tuner.
33	STEREO	I	Stereo detection signal from tuner.
34	TUNED	I	Tuned detection signal from tuner.
35	SQ (RDS) CLK	O	Clock output for sub-Q.
36	SQ (RDS) DI	I	Sub-Q input.
37	RDS RESET	O	Not used.
38	CLK	O	Clock output. Serial bus line.
39	D IN	I	Data input. Serial bus line.
40	D OUT	O	Data output. Serial bus line.

Pin No.	Pin Name	I/O	Function
41	TABLE SENS	I	Sense signal input.
42	REQ GM	I	Request signal from graphic control.
43	REQ MG	O	Request signal to graphic control.
44	CLK MG	O	Clock signal to graphic control.
45	DI GM	I	Data input from graphic control.
46	DO MG	O	Data output to graphic control.
47	MC RDY	I/O	RDY signal from/to graphic control.
48	VAREF	I	Analog reference voltage input.
49	VAss	—	} GND
50	Vss	—	
51	VDD	—	+5V
52	UNGEN. SIG	I	Not used. (Pull up)
53	URGENT. STBY	O	Not used.
54-57	SUBKEY4-1	I	Test land.
58, 59	DEST2, 1	I	} Not used.
60, 61	PWM1, 2	I	
62	B-PLAY	I	} Control signal input from deck.
63	B-SHUT	I	
64	B-HALF	I	
65	A-SHUT	I	
66	A-PLAY	I	
67	A-HALF	I	
68	CAP M H/L	O	Capstan motor control signal output.
69	CAP M ON/OFF	O	} Not used.
70	TRIG H/L	O	
71	B TRIG	O	
72	A TRIG	O	
73	RELAY REC/ $\overline{\text{PB}}$	O	} Control signal output for deck.
74	PB $\overline{\text{A/B}}$	O	
75	EQ H/ $\overline{\text{L}}$	O	
76	BIAS ON $\overline{\text{OFF}}$	O	
77	RM $\overline{\text{ON/OFF}}$	O	
78	REC/ $\overline{\text{PB}}$	O	
79	NR ON/OFF	O	Not used.
80	LM $\overline{\text{ON/OFF}}$	O	Mute signal output for deck.
81	PASS	O	Dolby switching signal output.
82	CDG MUTE	O	} Not used.
83	UP MOTOR	O	
84	DOWN MOTOR	O	
85	TABLE R (SCD)	O	Table control signal output.

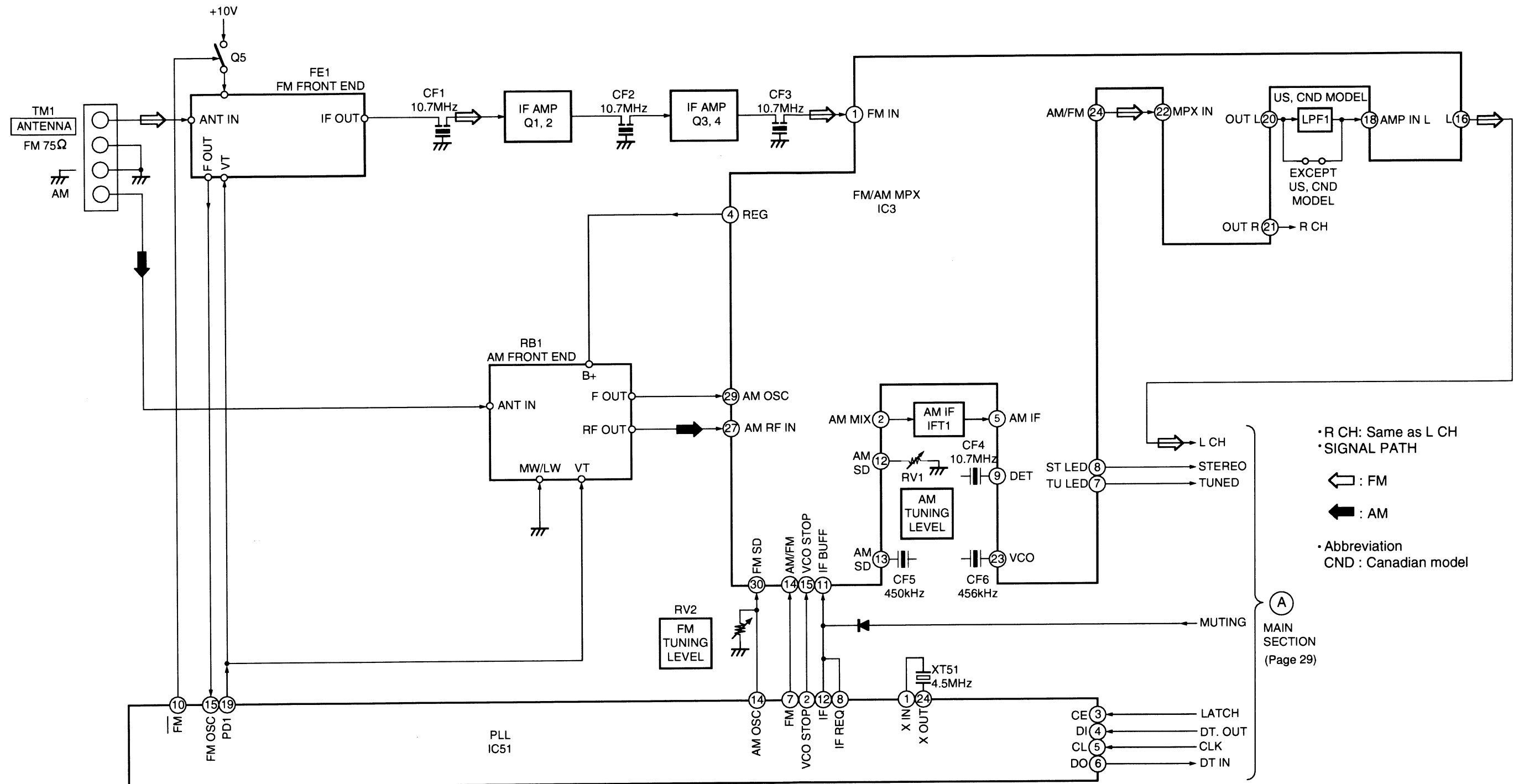
Pin No.	Pin Name	I/O	Function
86	TABLE L (SCD)	O	Table control signal output.
87	LOAD OUT	O	} Loading motor control signal output.
88	LOAD IN	O	
89	DF LATCH	O	Latch signal for digital filter.
90	XLT	O	Latch signal digital signal processor.
91	FOCUS SW	O	Focus switching signal output..
92	$\overline{\text{DUB HI}}$	I	Hi speed dubbing signal input.
93	TEST-1	I	Test land.
94	$\overline{\text{OUT SW}}$	I	Out switch signal input.
95	IN SW	I	Down switch signal input.
96	$\overline{\text{UP SW}}$ (SCD)	I	Up switch signal input.
97	$\overline{\text{PANEL SW}}$ (MAGK)	I	} Not used.
98	$\overline{\text{CLOSE SW}}$	I	
99	$\overline{\text{OPEN SW}}$	I	
100	VDD	—	+5V

6-3. BLOCK DIAGRAM  
— TUNER SECTION (AEP, German, Italian model) —

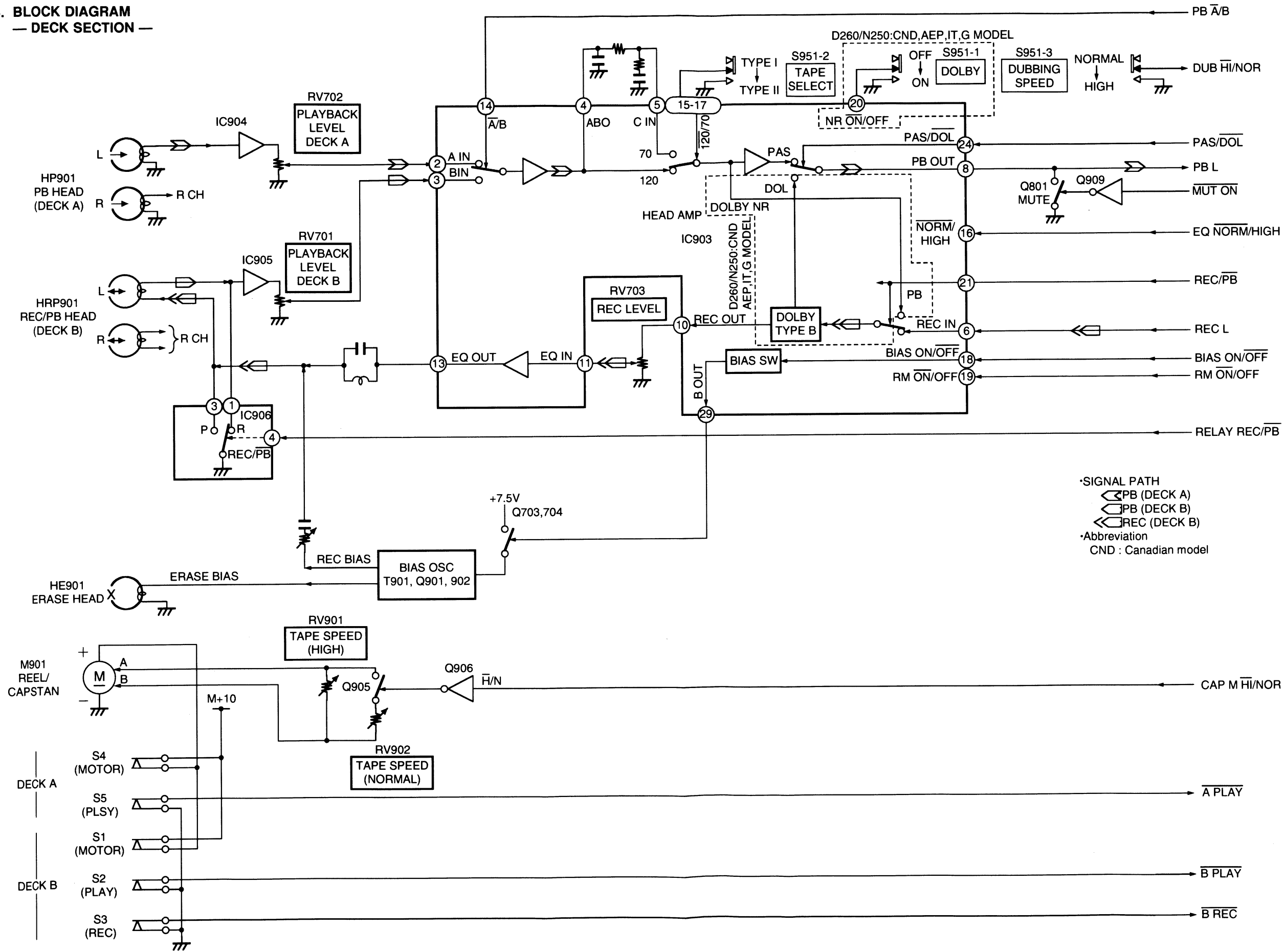


09

**6-4. BLOCK DIAGRAM**  
**— TUNER SECTION (EXCEPT AEP, German, Italian model) —**



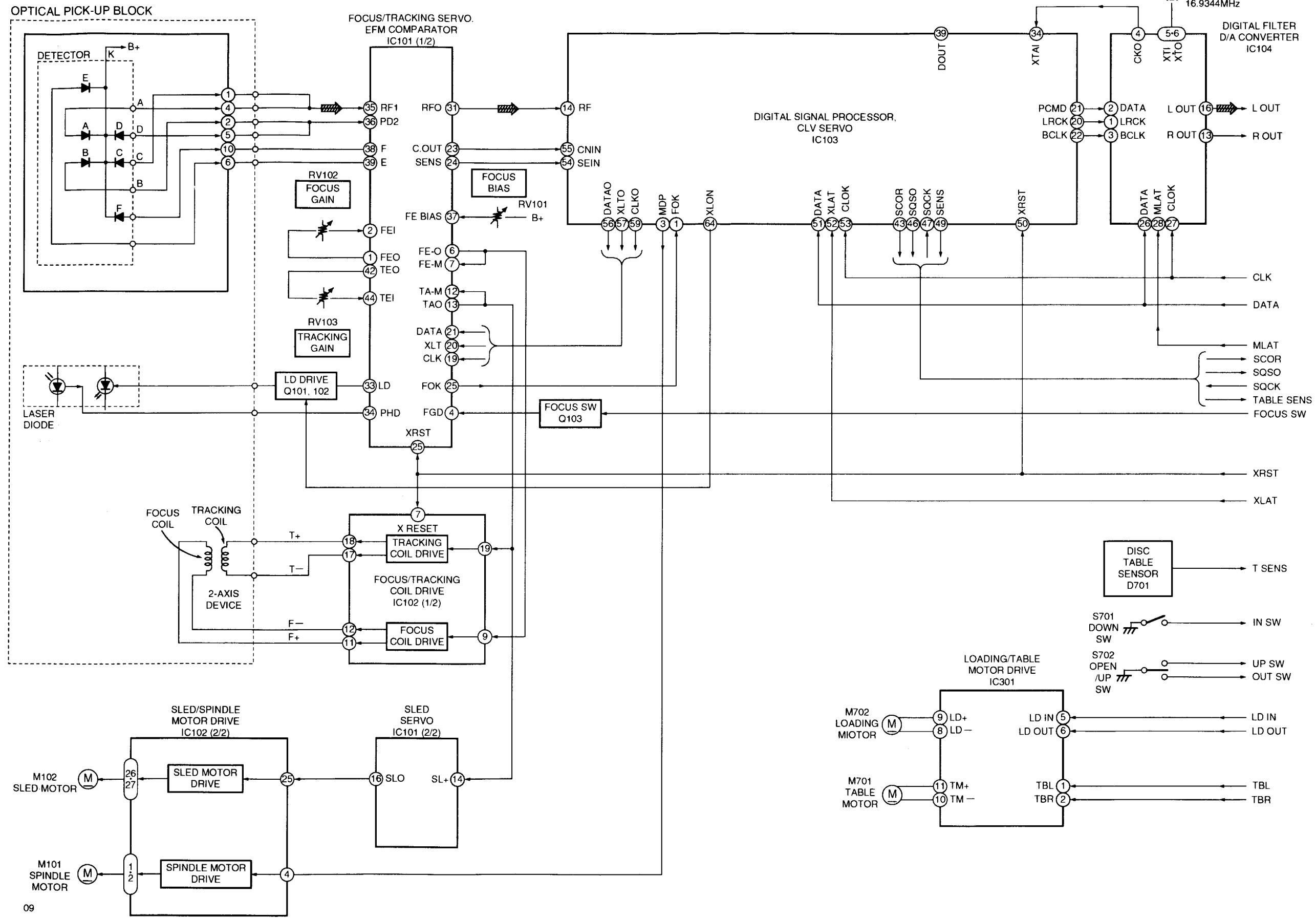
6-5. BLOCK DIAGRAM  
— DECK SECTION —



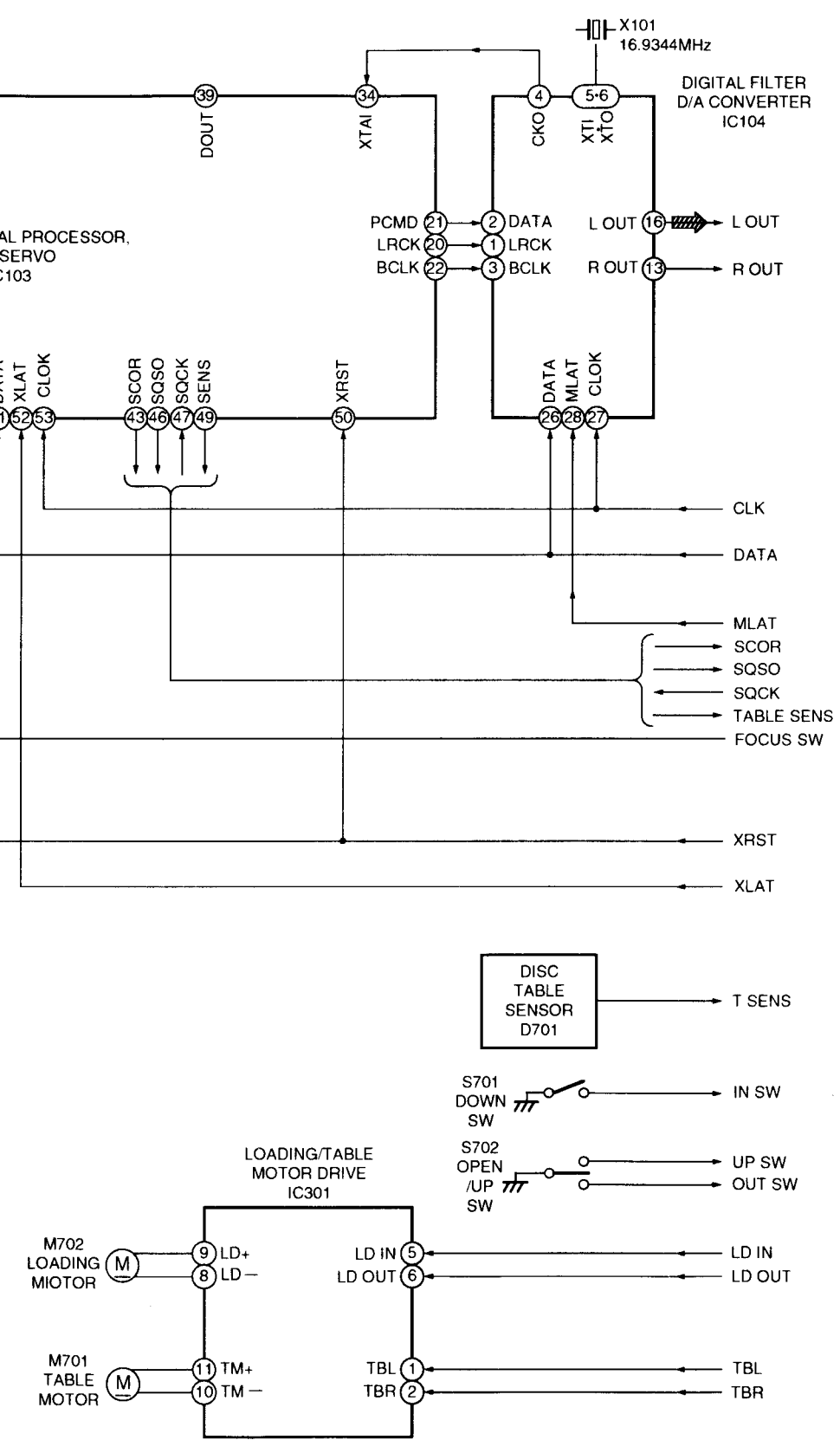
ⓑ MAIN SECTION  
(Page 29)



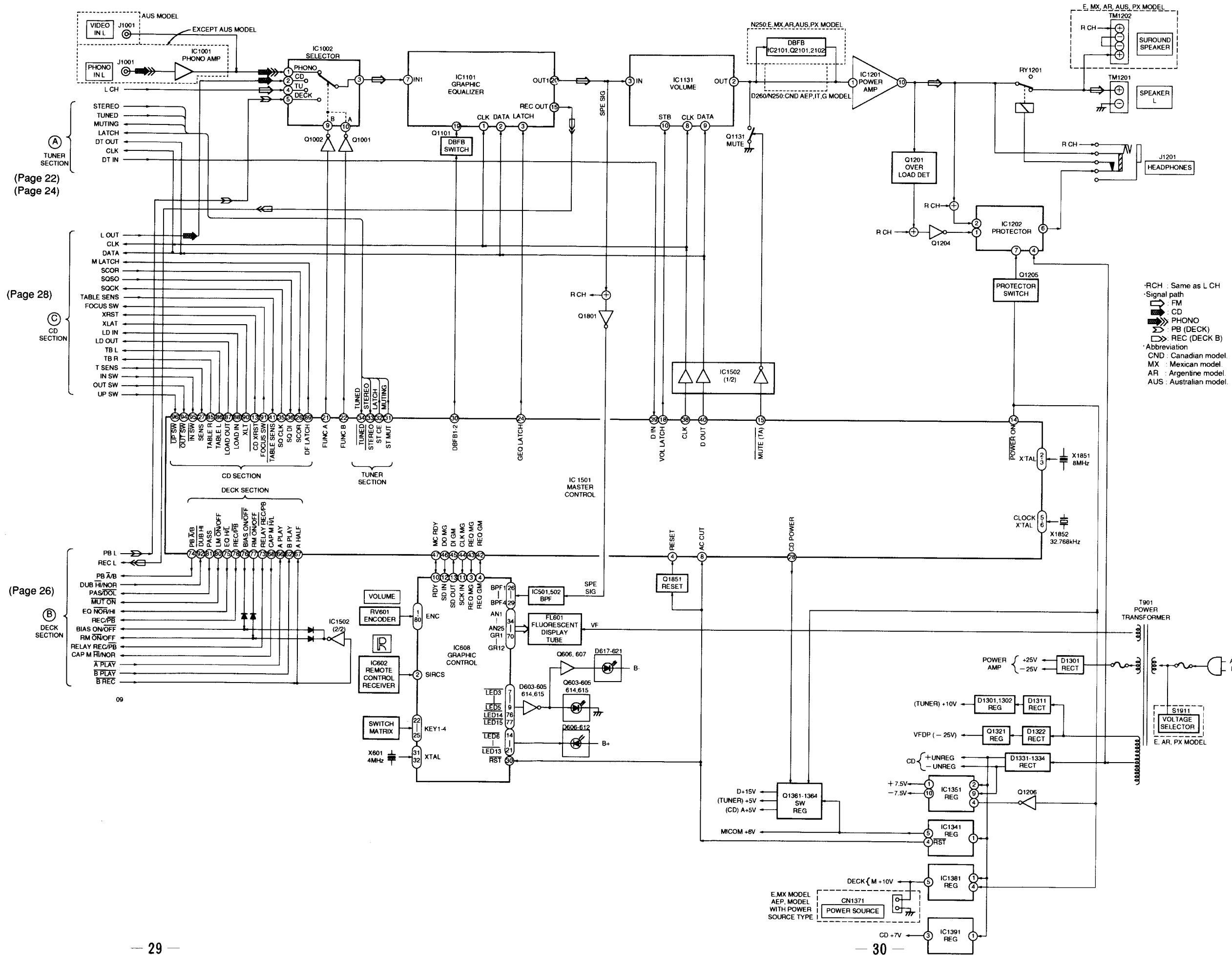
6-6. BLOCK DIAGRAM  
— CD SECTION —

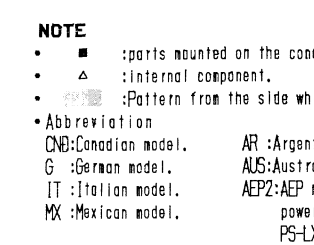


6-7. BLOCK  
— M

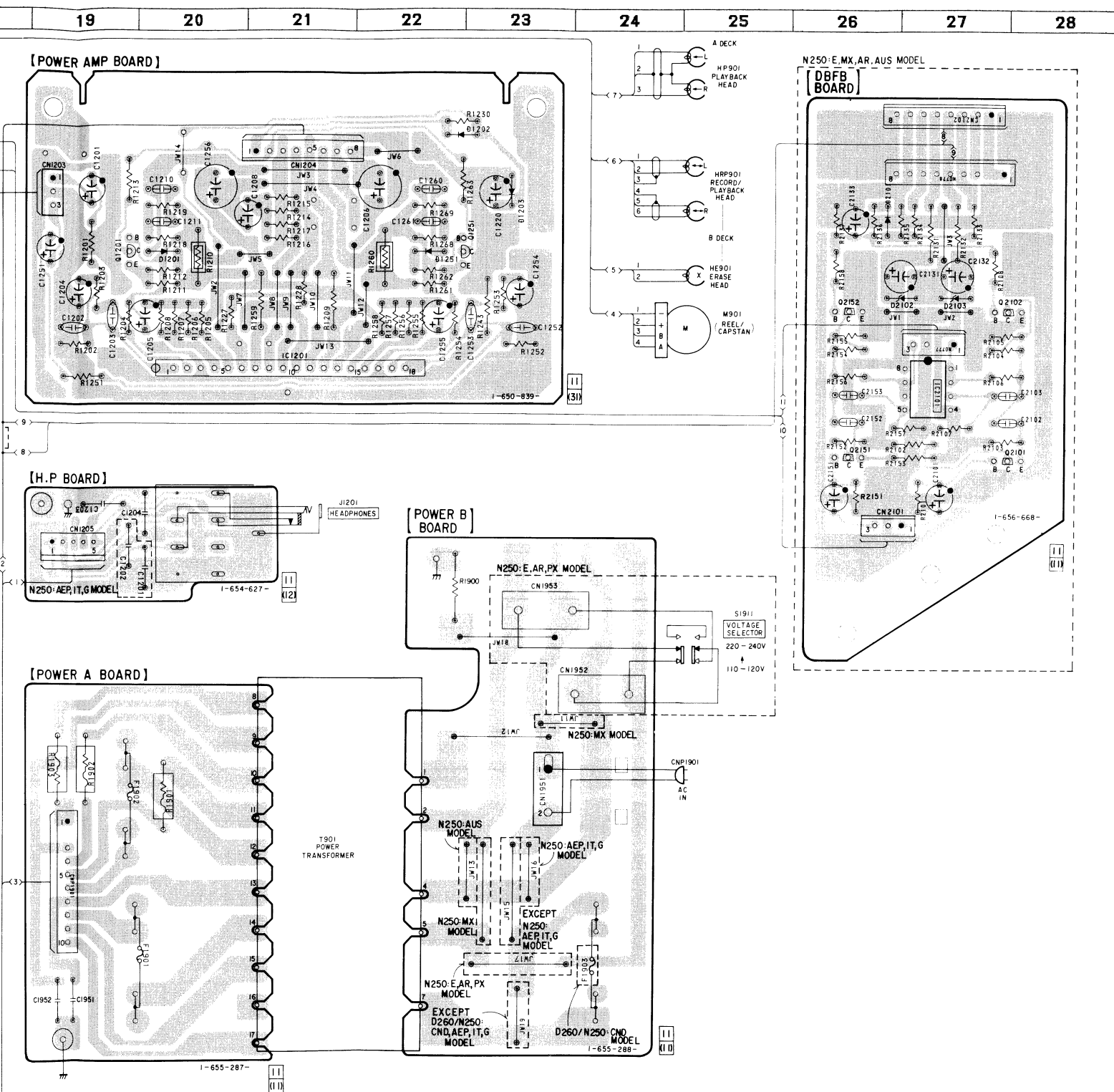


### 6-7. BLOCK DIAGRAM — MAIN SECTION —





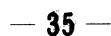




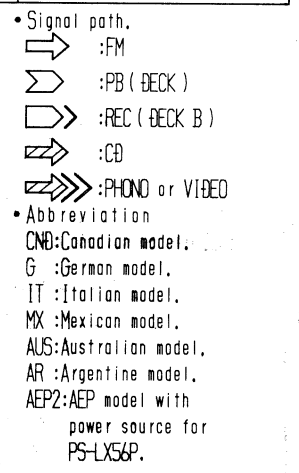
# • Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D901	B-10	IC1202	L-3
D902	D-11	IC1341	F-4
D903	A-6	IC1351	G-4
D904	B-8	IC1381	H-5
D905	A-6	IC1391	H-4
D906	B-8	IC1501	C-6
D1101	F-12	IC1502	D-5
D1201	C-20	IC2102	D-27
D1202	A-23		
D1203	B-23	Q1	G-17
D1204	K-4	Q2	G-17
D1205	J-4	Q3	G-16
D1206	F-3	Q4	G-16
D1251	C-22	Q5	I-16
D1301	I-8	Q6	J-13
D1309	I-8	Q7	J-14
D1310	I-7	Q8	L-13
D1311	K-10	Q9	L-14
D1312	K-10	Q10	L-13
D1321	L-9	Q11	L-13
D1322	K-9	Q701	E-17
D1331	I-8	Q801	E-16
D1332	I-8	Q901	A-10
D1333	I-8	Q902	C-10
D1334	I-8	Q903	B-11
D1341	F-5	Q904	C-11
D1361	E-5	Q905	C-9
D1362	F-5	Q906	C-9
D1364	D-9	Q909	E-15
D1366	E-3	Q1001	H-9
D1367	E-2	Q1002	H-9
D1382	H-3	Q1101	F-10
D1391	H-4	Q1131	G-7
D1701	D-6	Q1151	G-10
D1702	D-7	Q1181	G-7
D1851	C-4	Q1201	C-19
D1852	C-4	Q1204	L-2
D1853	C-4	Q1205	L-3
D2101	B-26	Q1206	L-4
D2102	C-27	Q1251	C-23
D2103	C-27	Q1301	J-10
		Q1302	K-10
		Q1303	K-10
IC1	H-17	Q1321	K-9
IC2	H-16	Q1361	E-3
IC3	H-14	Q1362	D-3
IC51	J-15	Q1363	E-5
IC903	C-16	Q1364	D-3
IC904	D-14	Q1801	H-8
IC905	B-13	Q1851	C-4
IC906	C-12	Q2101	D-28
IC1001	K-12	Q2102	C-28
IC1002	H-11	Q2151	D-26
IC1101	F-11	Q2152	C-26
IC1131	F-8		
IC1201	D-21		

- See page 62 for IC Block Diagrams. (IC1002, 1101, 1131, 1202, 1351, 1901)
- See page 18 for IC Pin Functions. (IC1501)

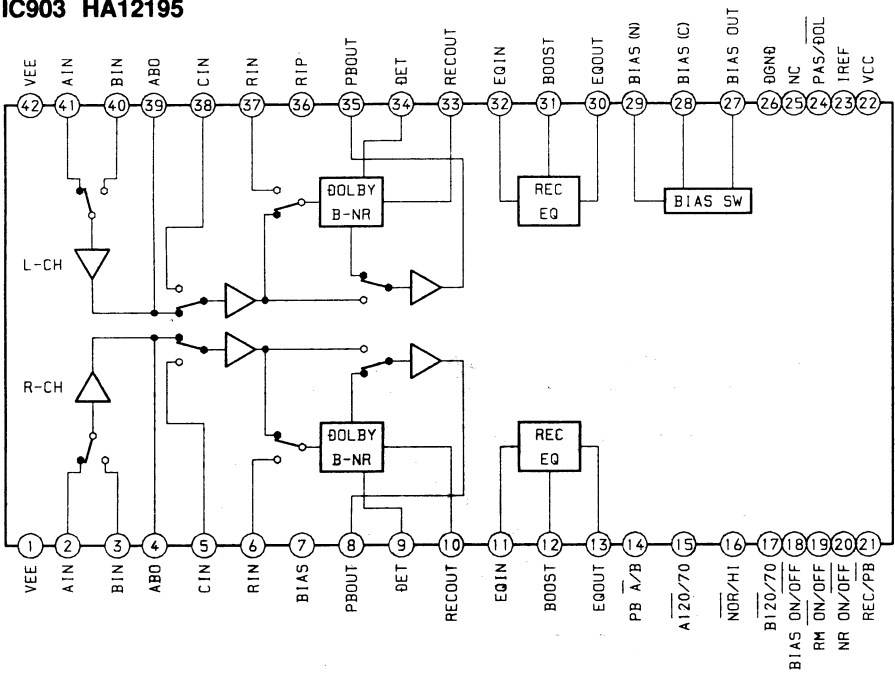




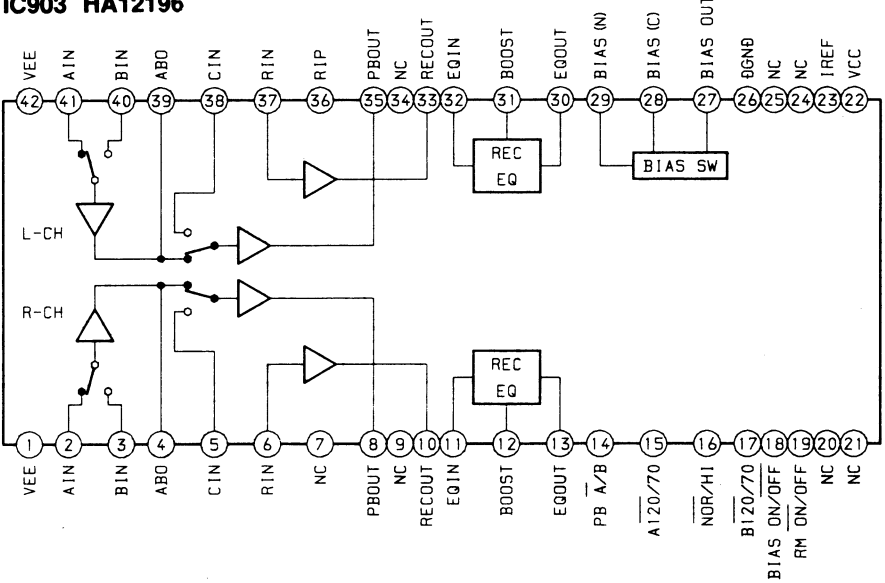


• IC Block Diagrams.

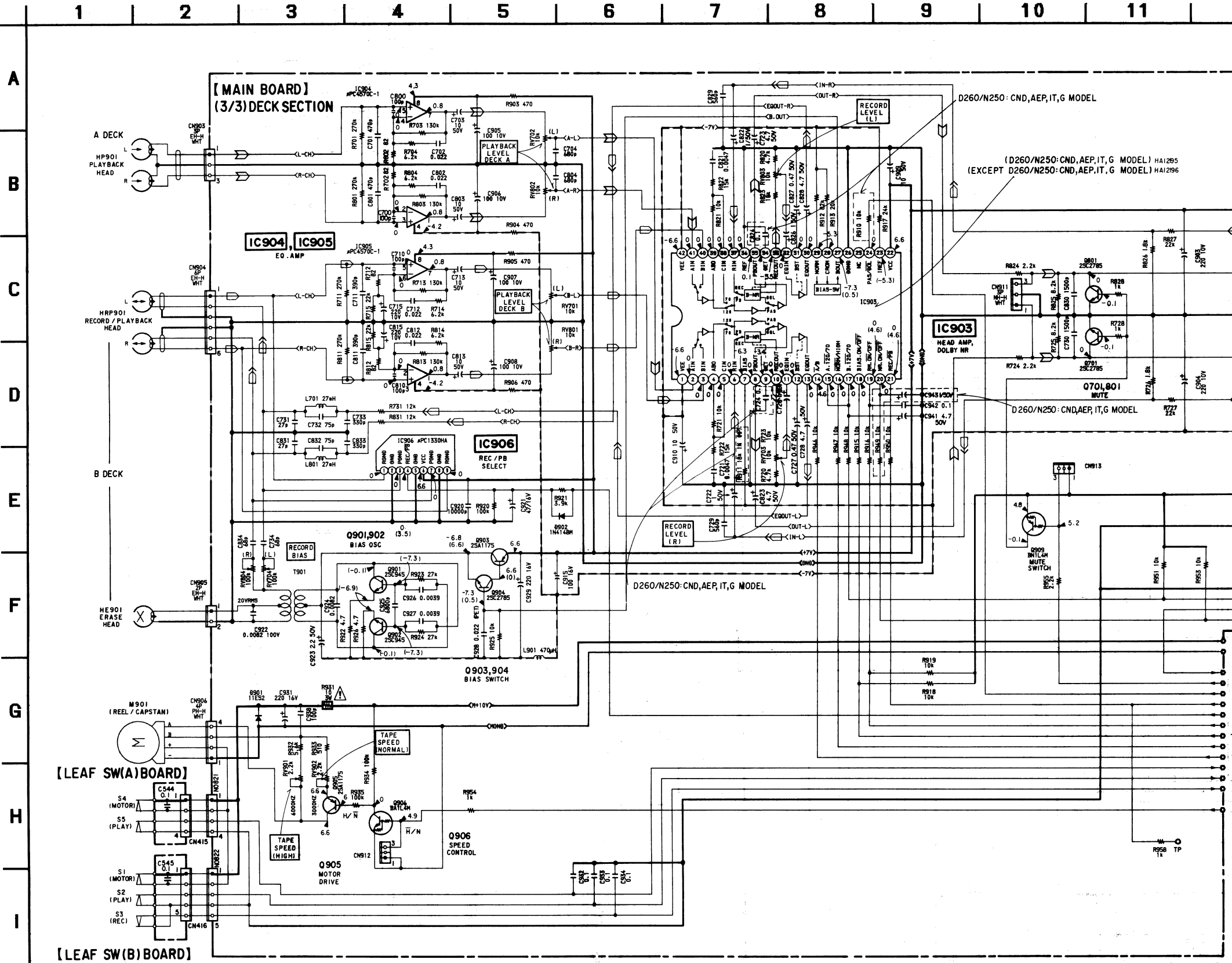
IC903 HA12195



IC903 HA12196



6-10. SCHEMATIC DIAGRAM — DECK SECTION —  
• Refer to page 31 for Printed Wiring Board (Main Board).



NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted,  $\text{pF}:\mu\text{F}$  50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.

- $\%$  : indicates tolerance.
- : nonflammable resistor.
- : panel designation.

Note:

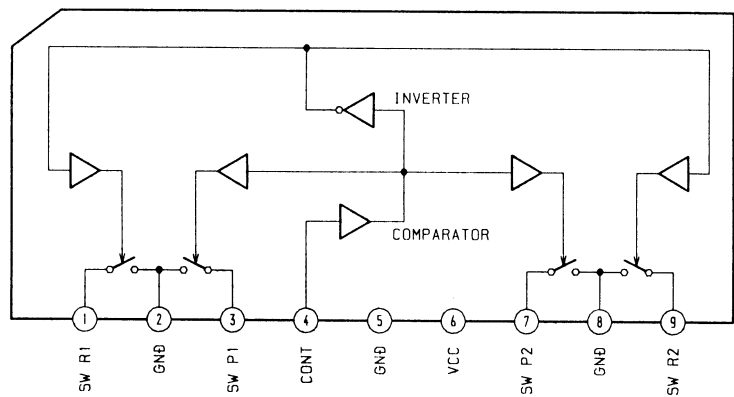
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

Note:

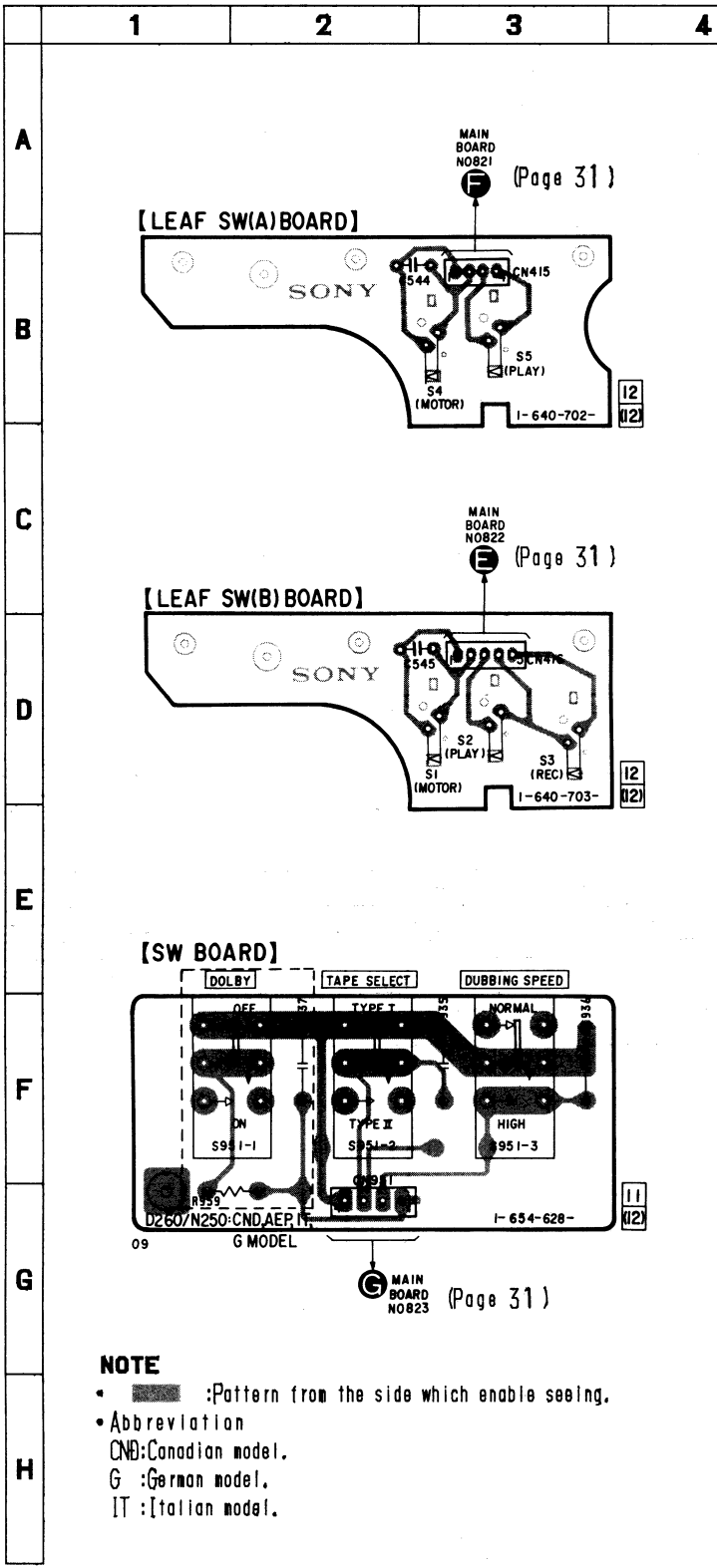
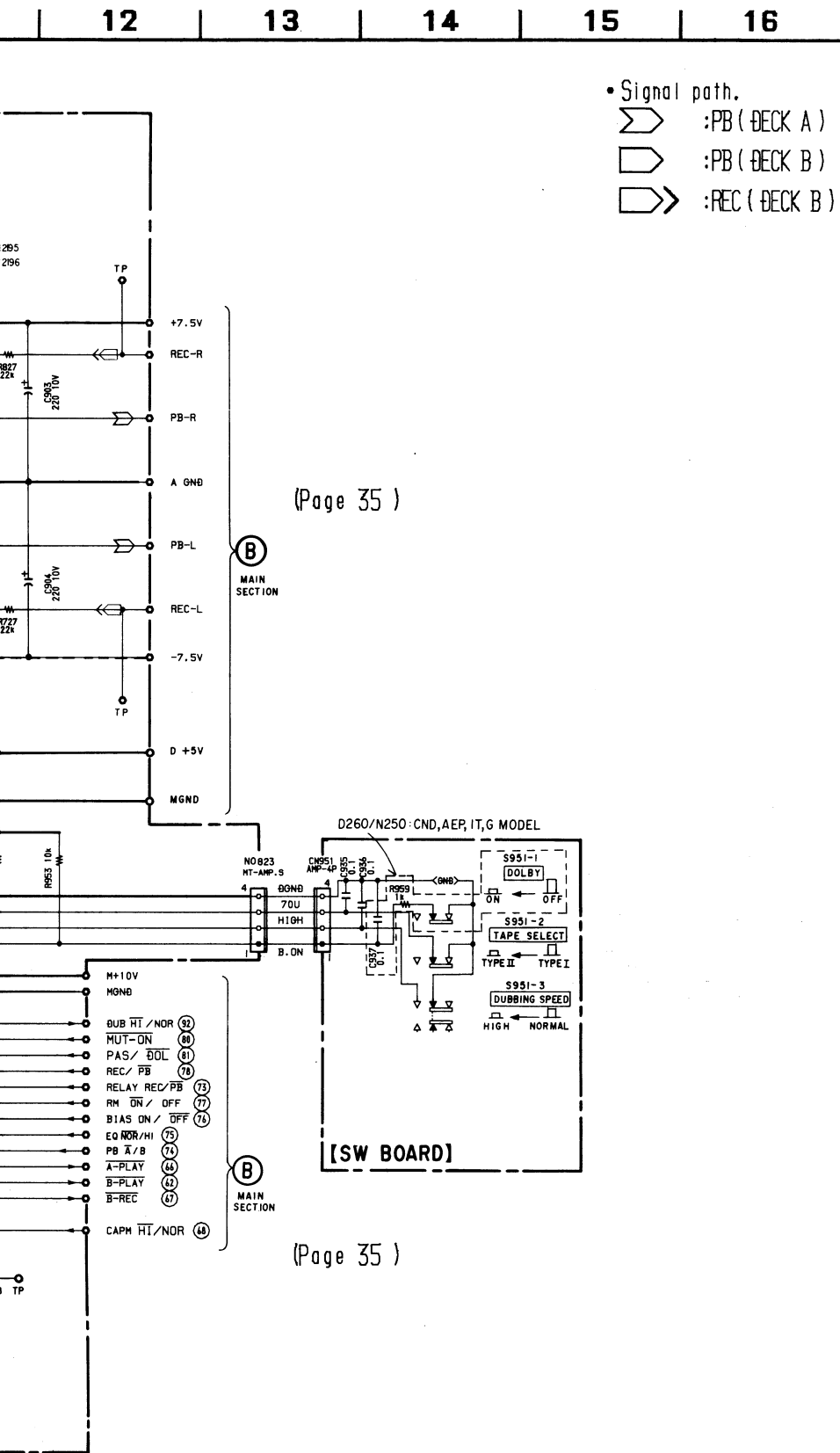
Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Voltages and waveforms under no-signal condition: no mark: PLAY ( ) : REC
- Voltages are taken from Voltage variations: tolerance.





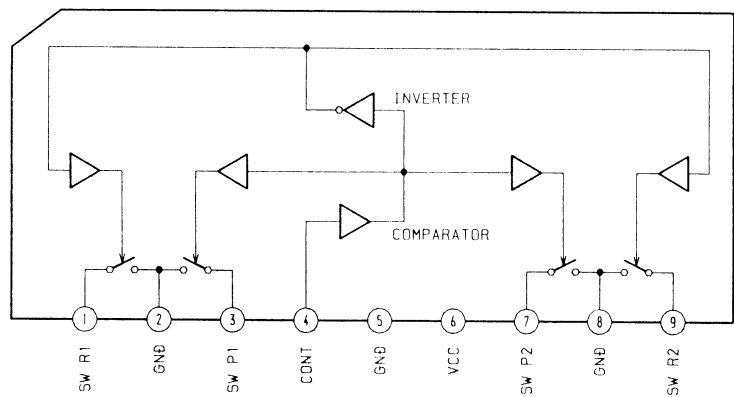
6-11. PRINTED WIRING BOARD — DECK SECTION —  
• See page 17 for Circuit Boards Location.



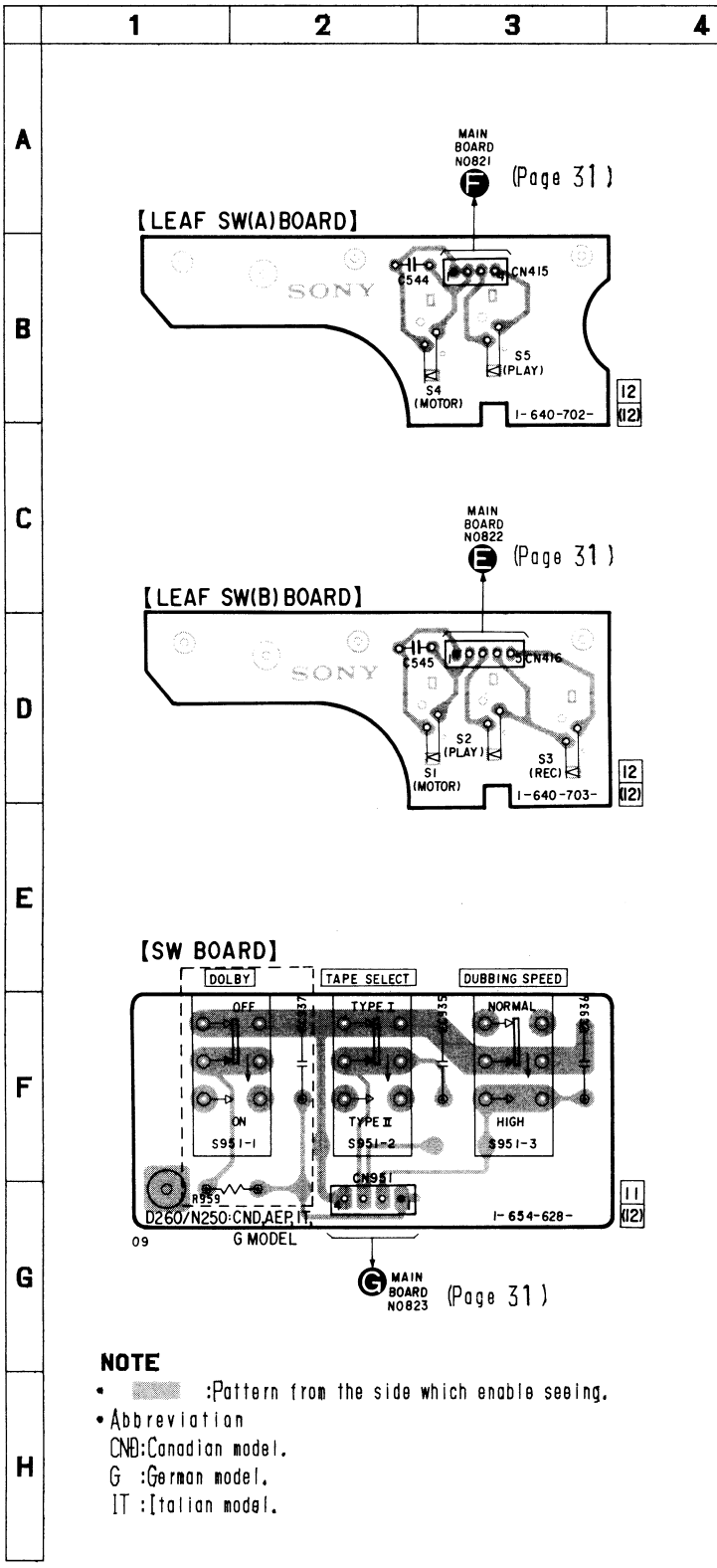
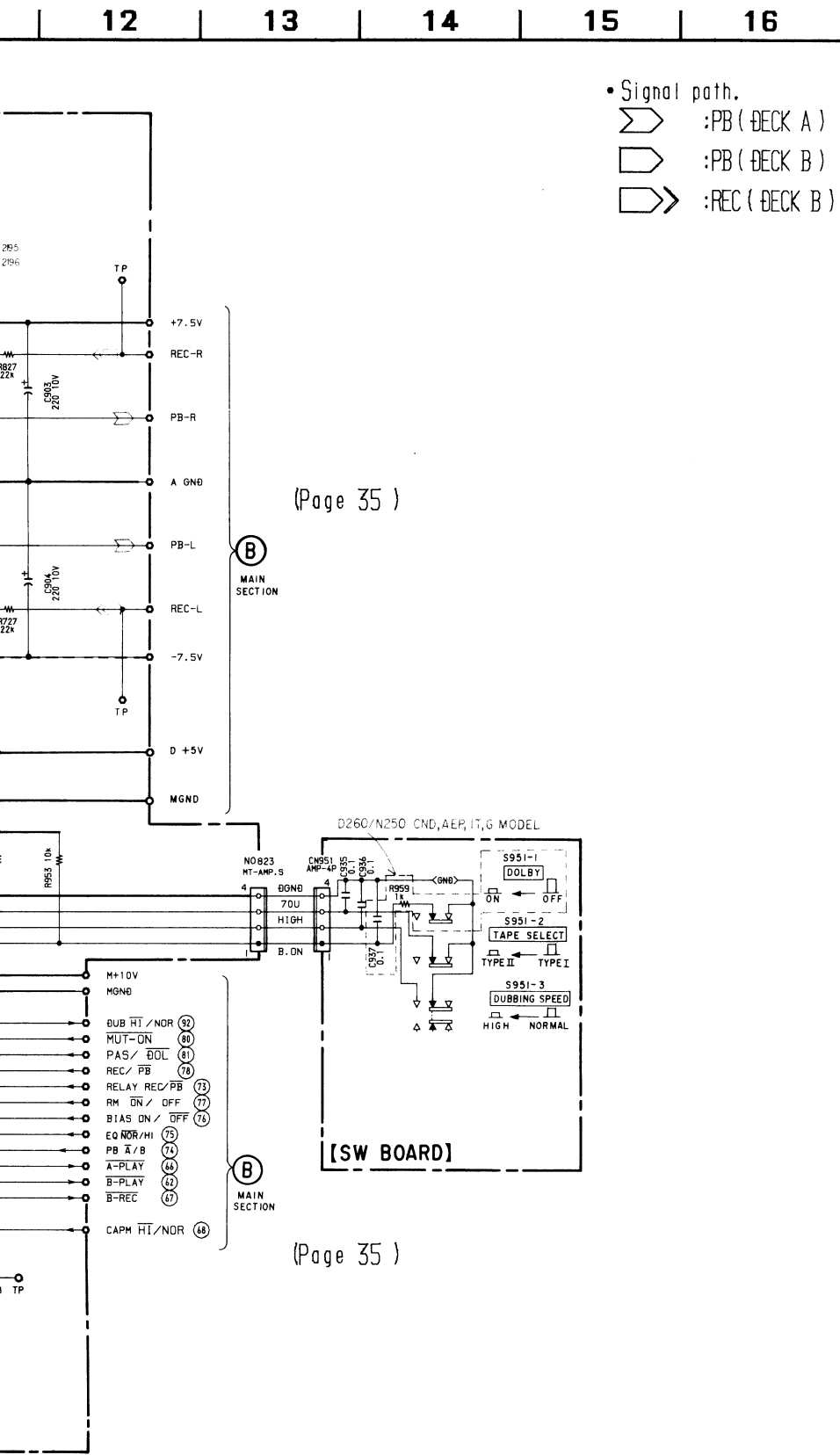
and waveforms are dc with respect to ground  
-signal conditions.  
PLAY  
REC  
are taken with a VOM (Input impedance 10M  $\Omega$ ).  
variations may be noted due to normal produc-  
erances.

- — :B+ Line.
- - - - :B- Line.
- [ ] :adjustment for repair.
- Abbreviation  
CND:Canadian model.  
G :German model.  
IT :Italian model.

IC906  $\mu$ PC1330HA



6-11. PRINTED WIRING BOARD — DECK SECTION —  
• See page 17 for Circuit Boards Location.

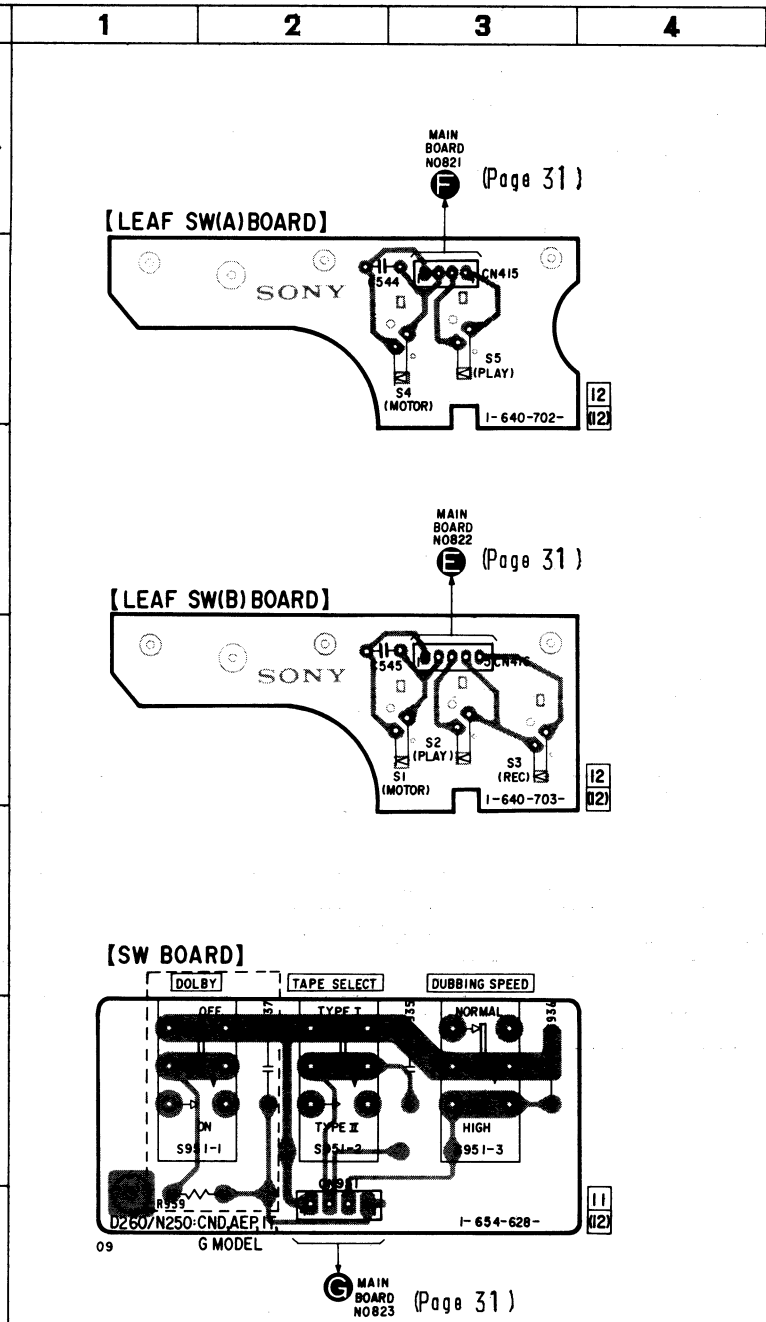


**NOTE**  
• :Pattern from the side which enable seeing.  
• Abbreviation  
CND:Canadian model.  
G :German model.  
IT :Italian model.

and waveforms are dc with respect to ground  
-signal conditions.  
PLAY  
REC  
are taken with a VOM (Input impedance 10M  $\Omega$ ).  
variations may be noted due to normal produc-  
erances.

• :B+ Line.  
• :B- Line.  
• :adjustment for repair.  
• Abbreviation  
CND:Canadian model.  
G :German model.  
IT :Italian model.

6-11. PRINTED WIRING BOARD — DECK SECTION —  
 • See page 17 for Circuit Boards Location.

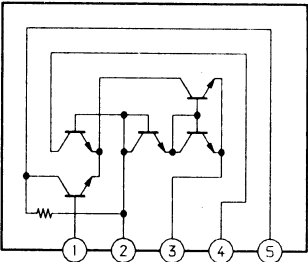


**NOTE**

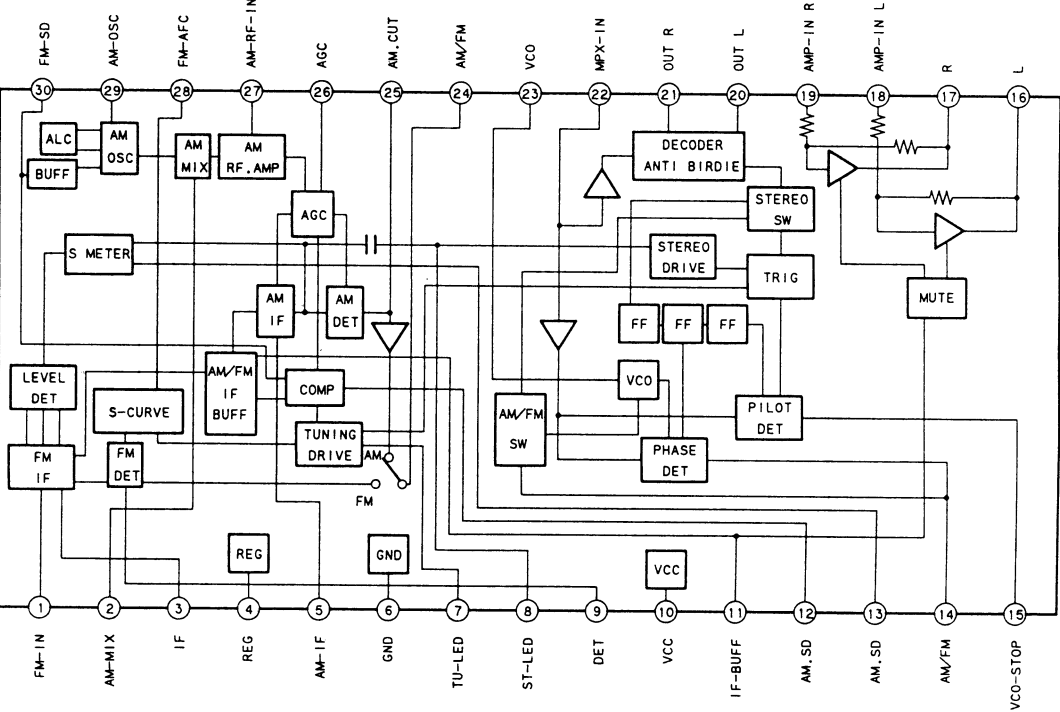
- :Pattern from the side which enable seeing.
- Abbreviation
- CND:Canadian model.
- G :German model.
- IT :Italian model.

• IC Block Diagrams.

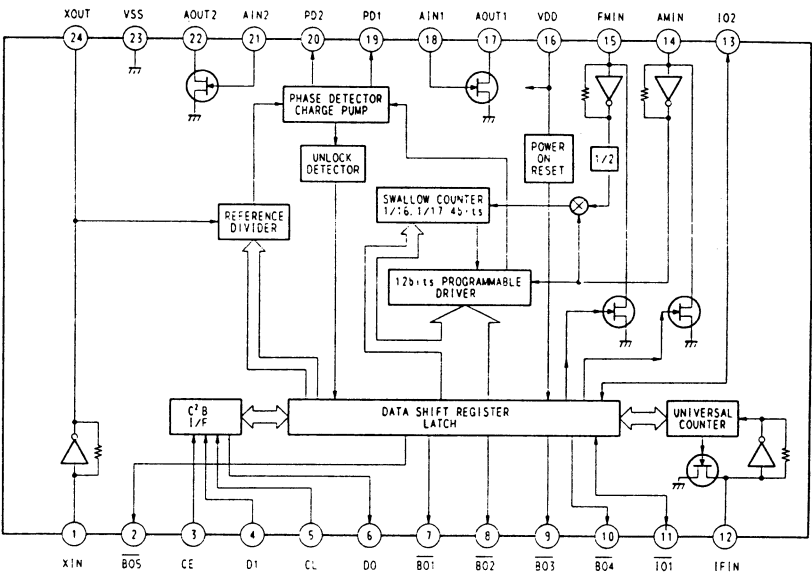
IC1, 2 TA7060AP



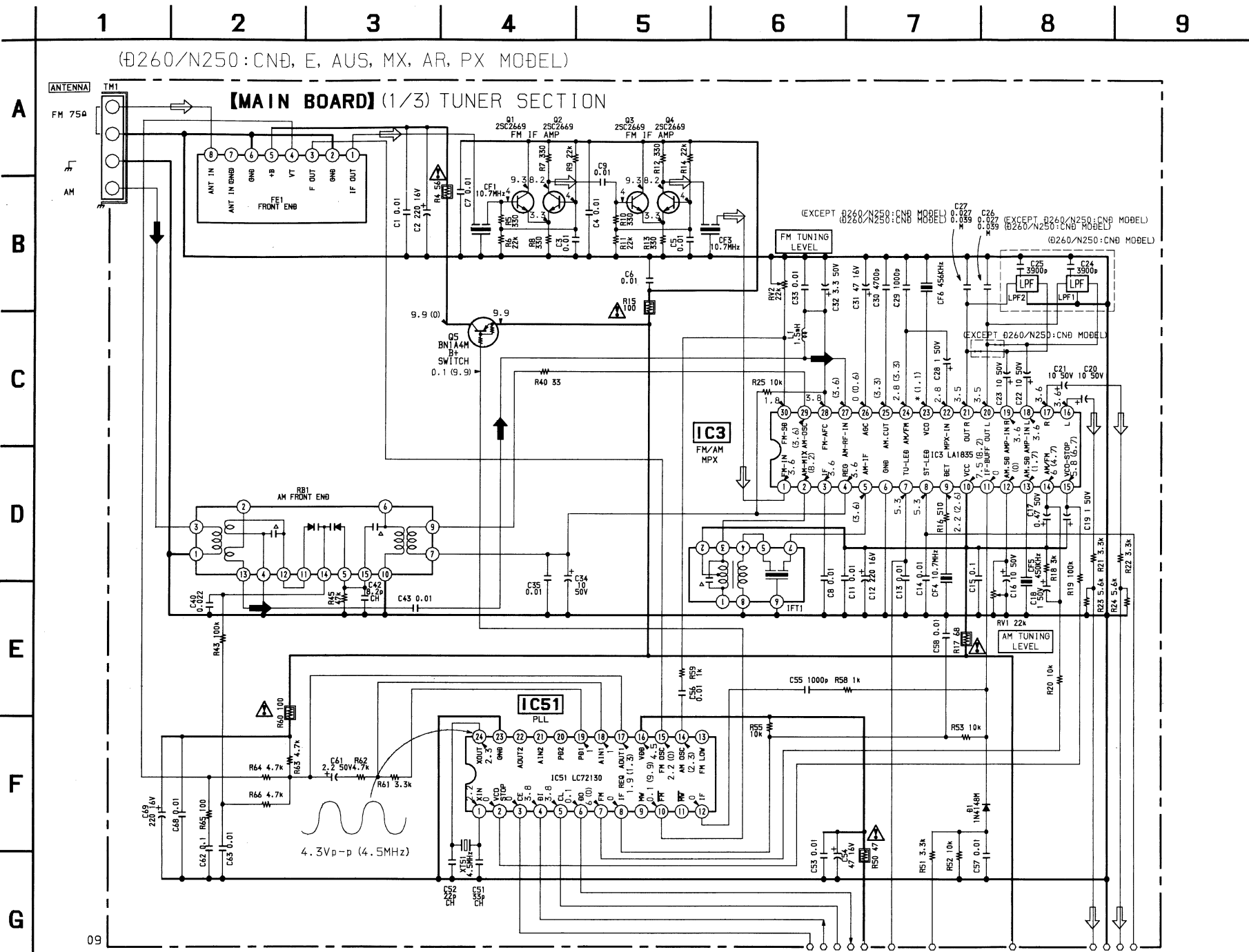
IC3 LA1835



IC51 LC72130



6-12. SCHEMATIC DIAGRAM — TUNER SECTION —  
• Refer to page 31 for Printed Wiring Board (Main Board).  
• See page 42 for IC Block Diagrams. (IC1, 2, 3, 51)



**NOTE**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
- $\square$  : nonflammable resistor.
- $\square$  : panel designation.
- $\square$  : B+ Line.
- $\square$  : adjustment for repair.
- Signal path.
- $\rightarrow$  : FM
- $\rightarrow$  : AM

Abbreviation  
CNB: Canadian model.  
AUS: Australian model.  
MX : Mexican model.  
AR : Argentine model.

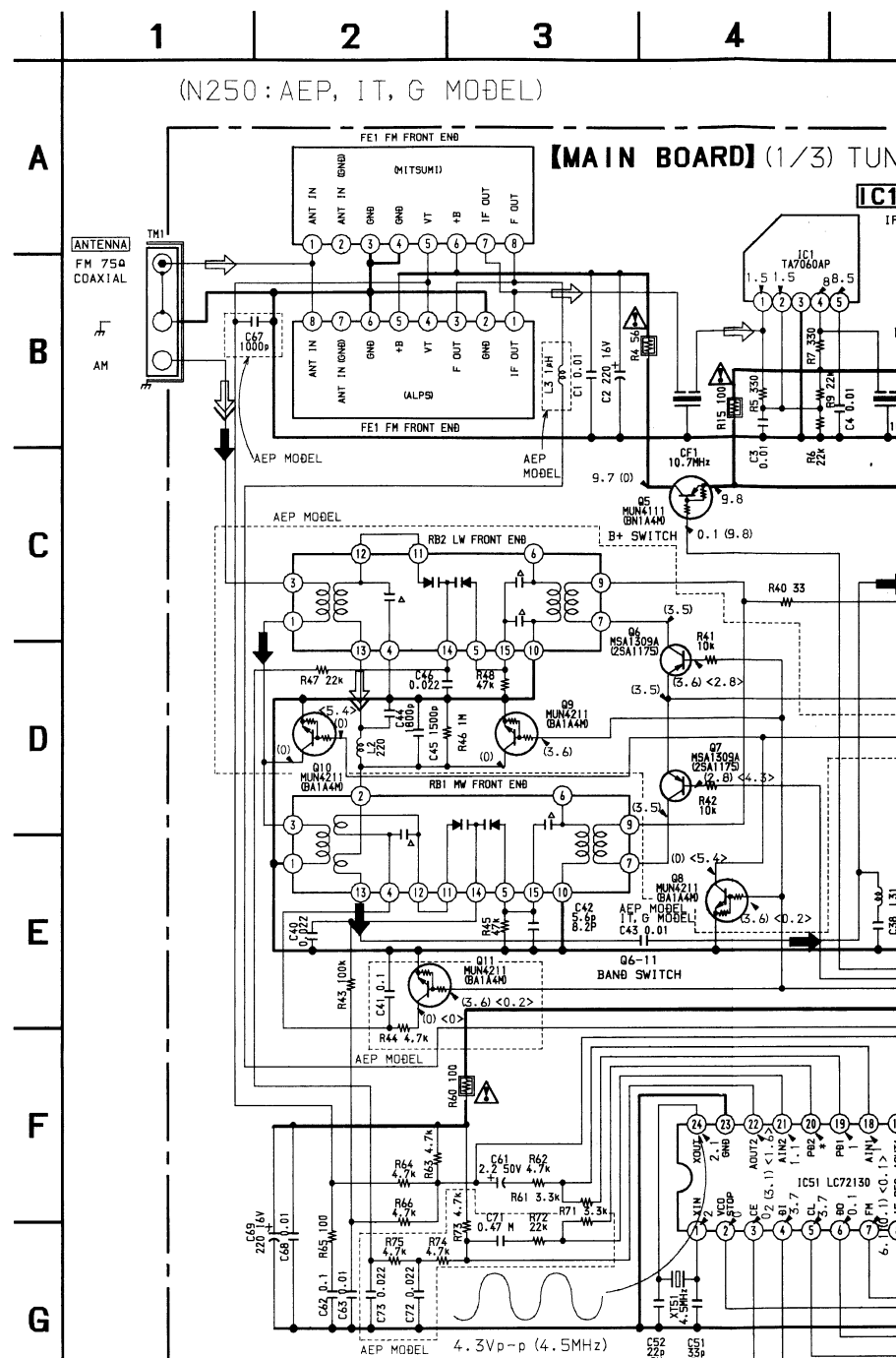
Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark: FM  
( ) : AM  
\* : can not be measured.

Voltages are taken with a VOM (Input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.

Note:  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



**NOTE**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
- $\square$  : nonflammable resistor.
- $\square$  : panel designation.

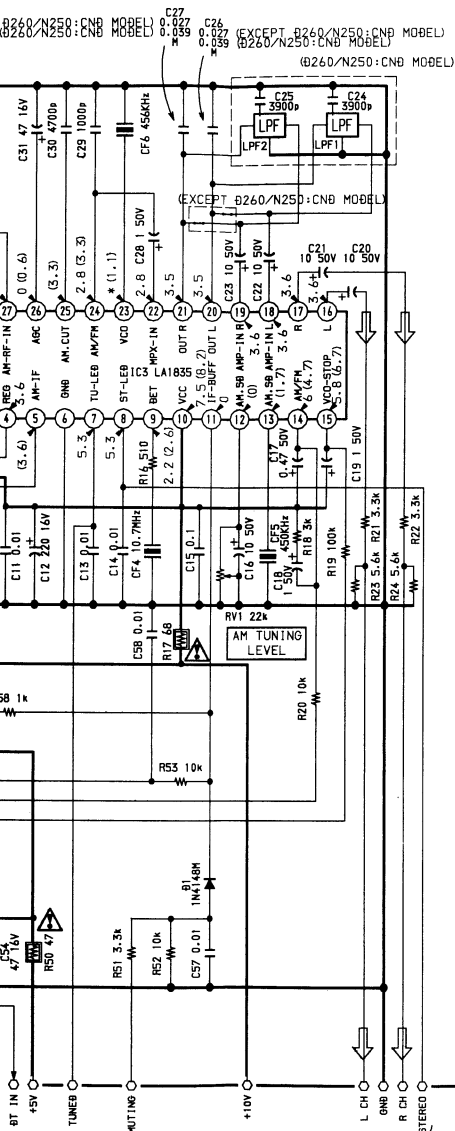
Abbreviation  
CNB: Canadian model.  
AUS: Australian model.  
MX : Mexican model.  
AR : Argentine model.

Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark: FM  
( ) : MW  
< : LW  
\* : can not be measured.



Voltages are taken with a VOM (Input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.


Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.

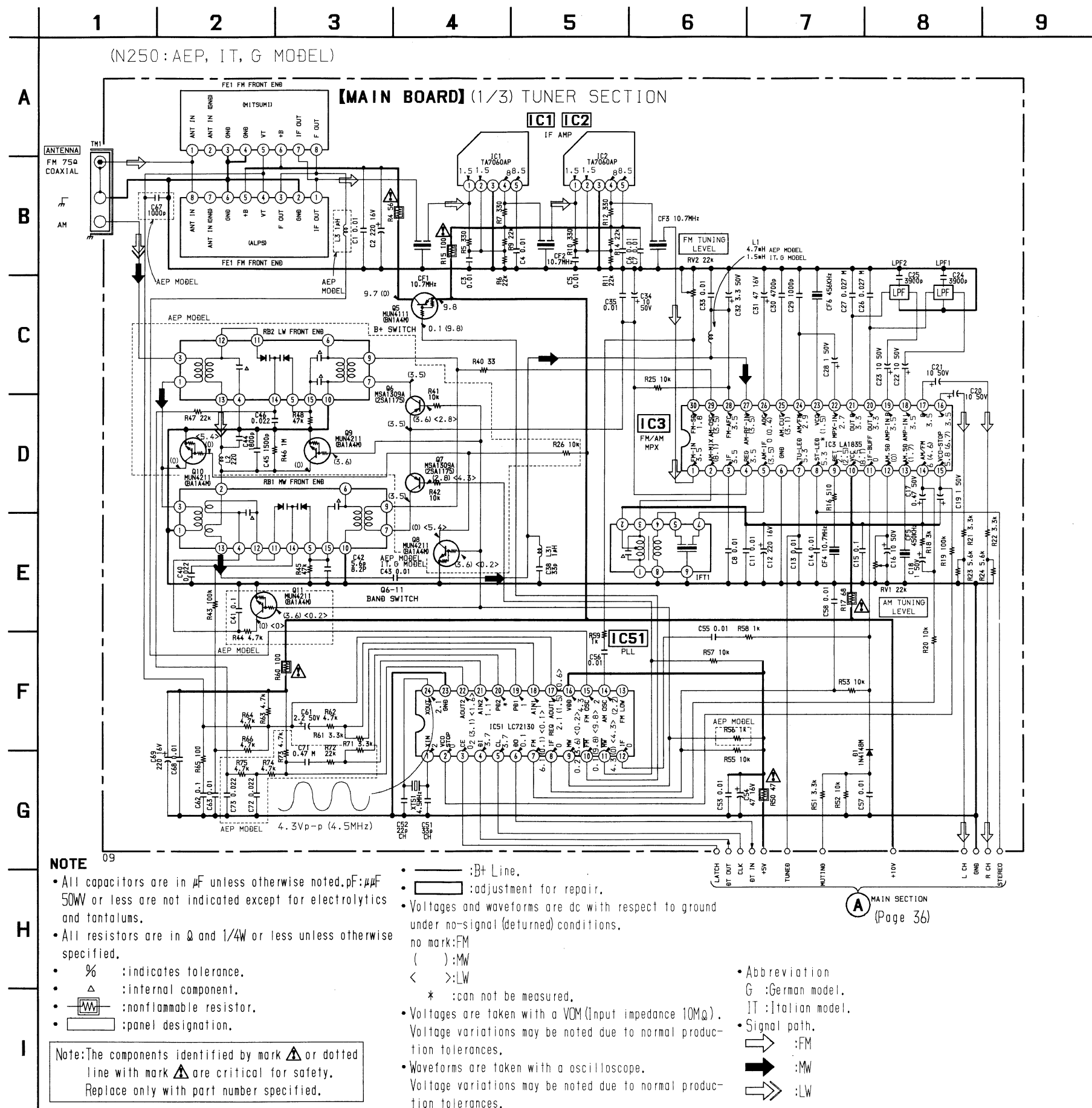
Note:  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.







**A** MAIN SECTION  
(Page 36)



Note:  
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.



**Note:**  
Les composants identifiés par une marque  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifique.






### NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
-  : nonflammable resistor.
-  : panel designation.
-  : BT Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- ( ) : MW
- < > : LW
- \* : can not be measured.
- Voltages are taken with a VOM (input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production.

Note: The components identified by mark  or dotted line with mark  are critical for safety.  
Replace only with part number specified.

-  :B+ Line.
-  :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark:FM  
( ) :MW  
< > :LW  
\* :can not be measured.
- Voltages are taken with a VOM (Input impedance 10M $\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.

- Abbreviation  
G : German model.  
IT : Italian model.
- Signal path.  
 : FM  
 : MW  
 : LW

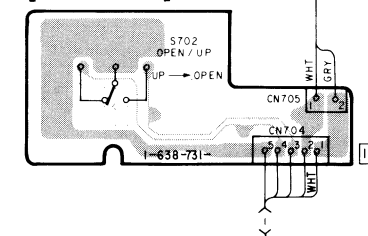
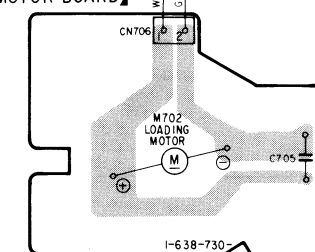
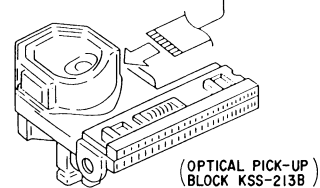
6-13. PRINTED WIRING BOARD — CD SECTION —  
 • See page 17 for Circuit Boards Location.  
 • See page 64 for Semiconductor Lead Layouts.

• Semiconductor Location

Ref. No.	Location
D301	B-17
D302	C-18
D303	D-18
D701	I-16
IC101	D-9
IC102	C-8
IC103	E-3
IC104	F-11
IC301	B-17
Q101	D-6
Q102	D-7
Q103	F-6



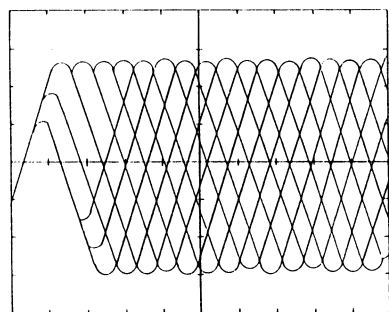




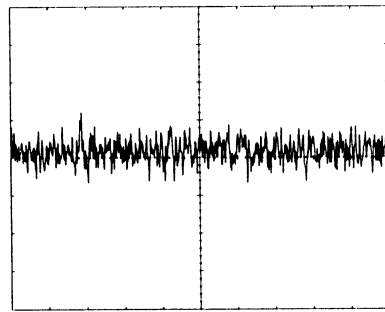
# 6-14. SCHEMATIC DIAGRAM — CD SECTION —

## • Waveforms.

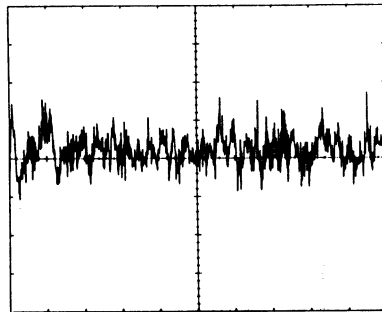
① IC101 ③ 1.4Vp-p



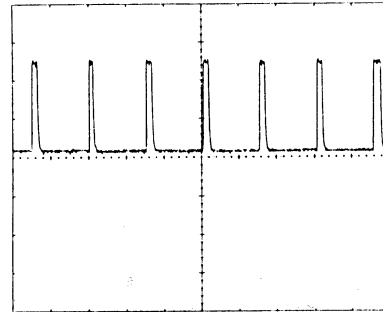
② IC101 ④ 8mVp-p 0.2ms/DIV



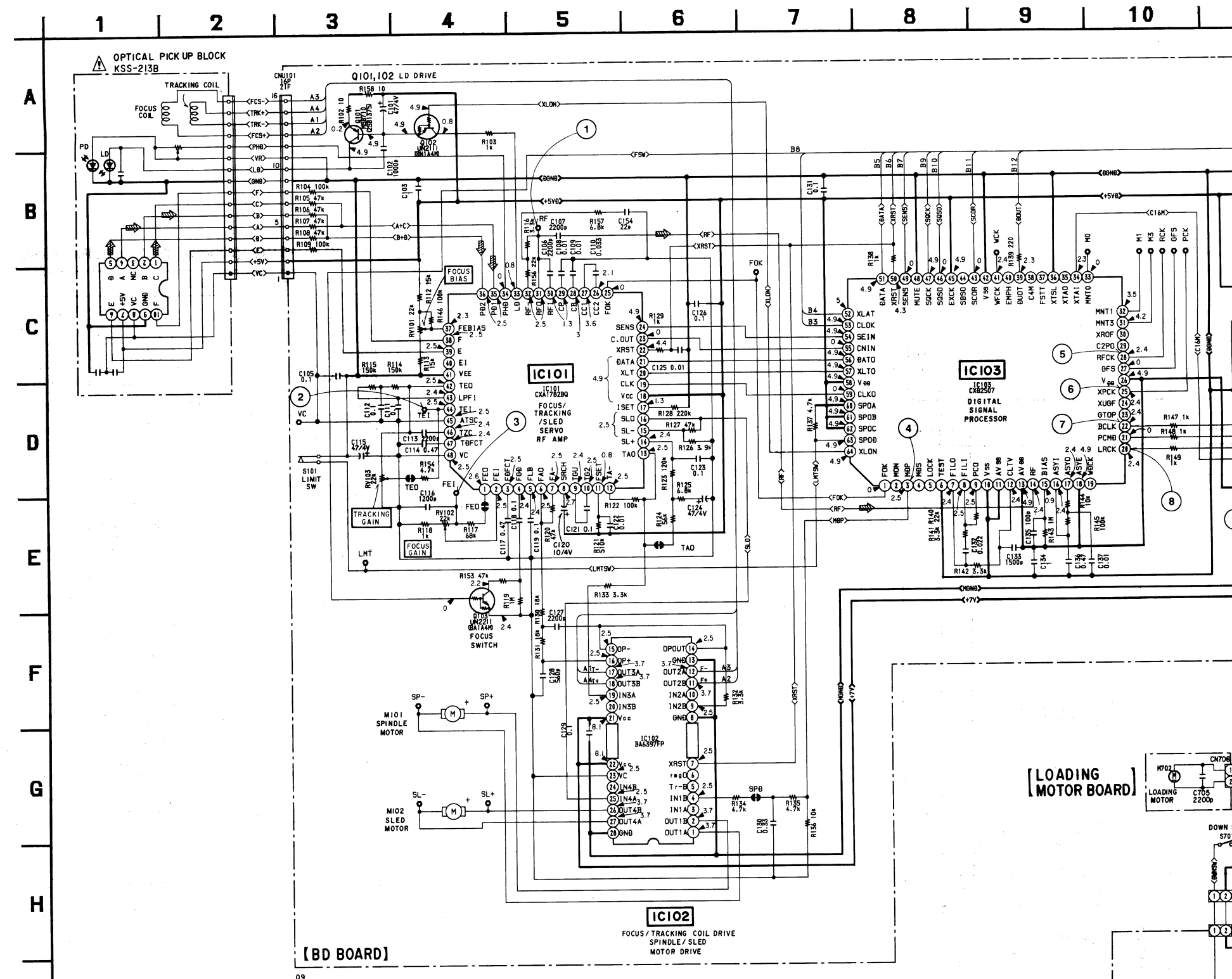
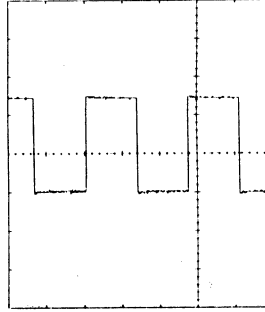
③ IC101 ② 20mVp-p 2ms/DIV



④ IC103 ③ 2.4Vp-p 7.5μsec



⑤ IC103 ② 5.1Vp-p



## NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.

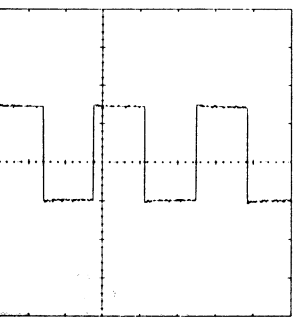
Note:  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Note:  
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

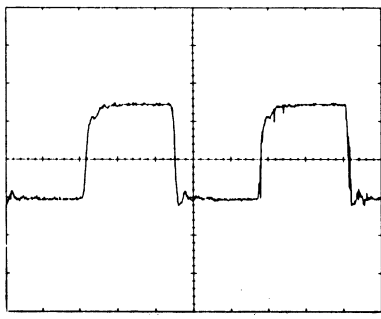
- ——— :B+ Line.
- - - - :B- Line.
- $\square$  :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions. no mark: STOP (C)
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.



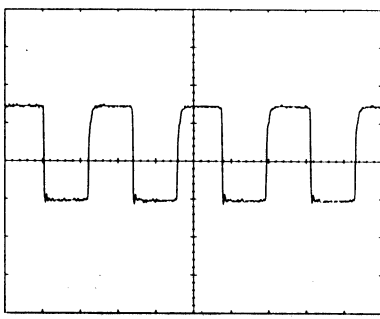
103 ② 5.1Vp-p 137μsec



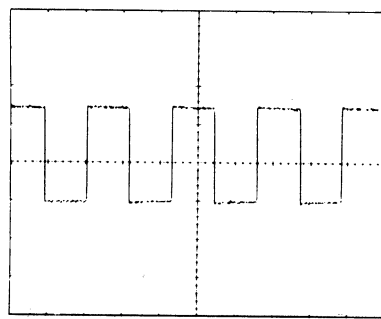
⑥ IC103 ⑤ 5.1Vp-p 232.7μsec



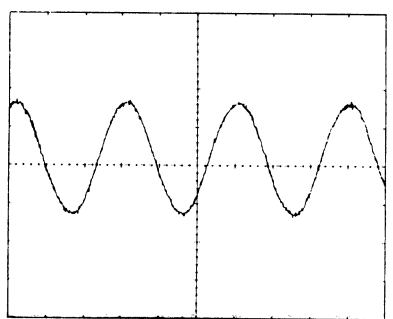
⑦ IC103 ② 5.1Vp-p 472.7μsec



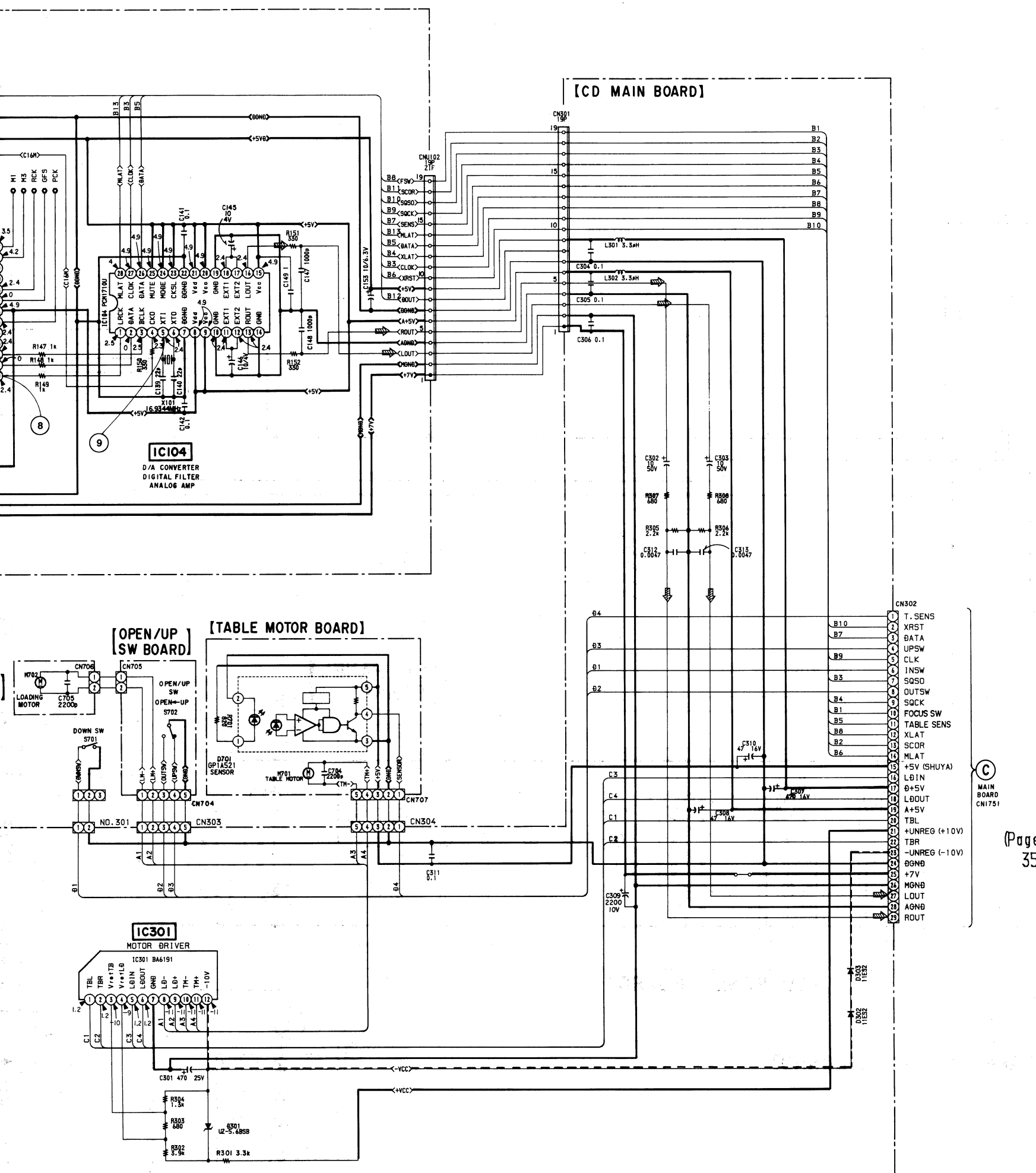
⑧ IC103 ② 5.1Vp-p 23μsec



⑨ IC104 ⑤ 3Vp-p 16.9344MHz

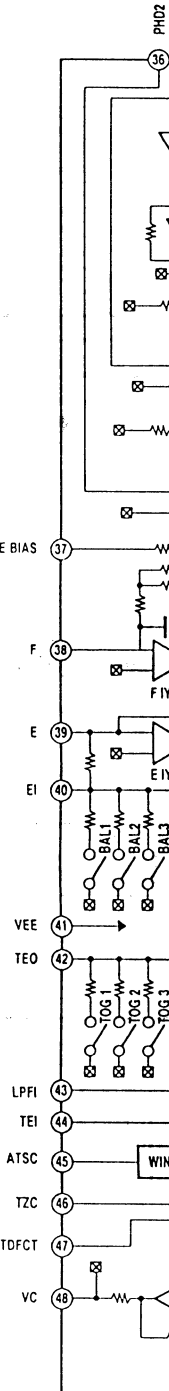


10 11 12 13 14 15 16 17 18 19



(Page 35)

• IC Block  
IC101 CXA

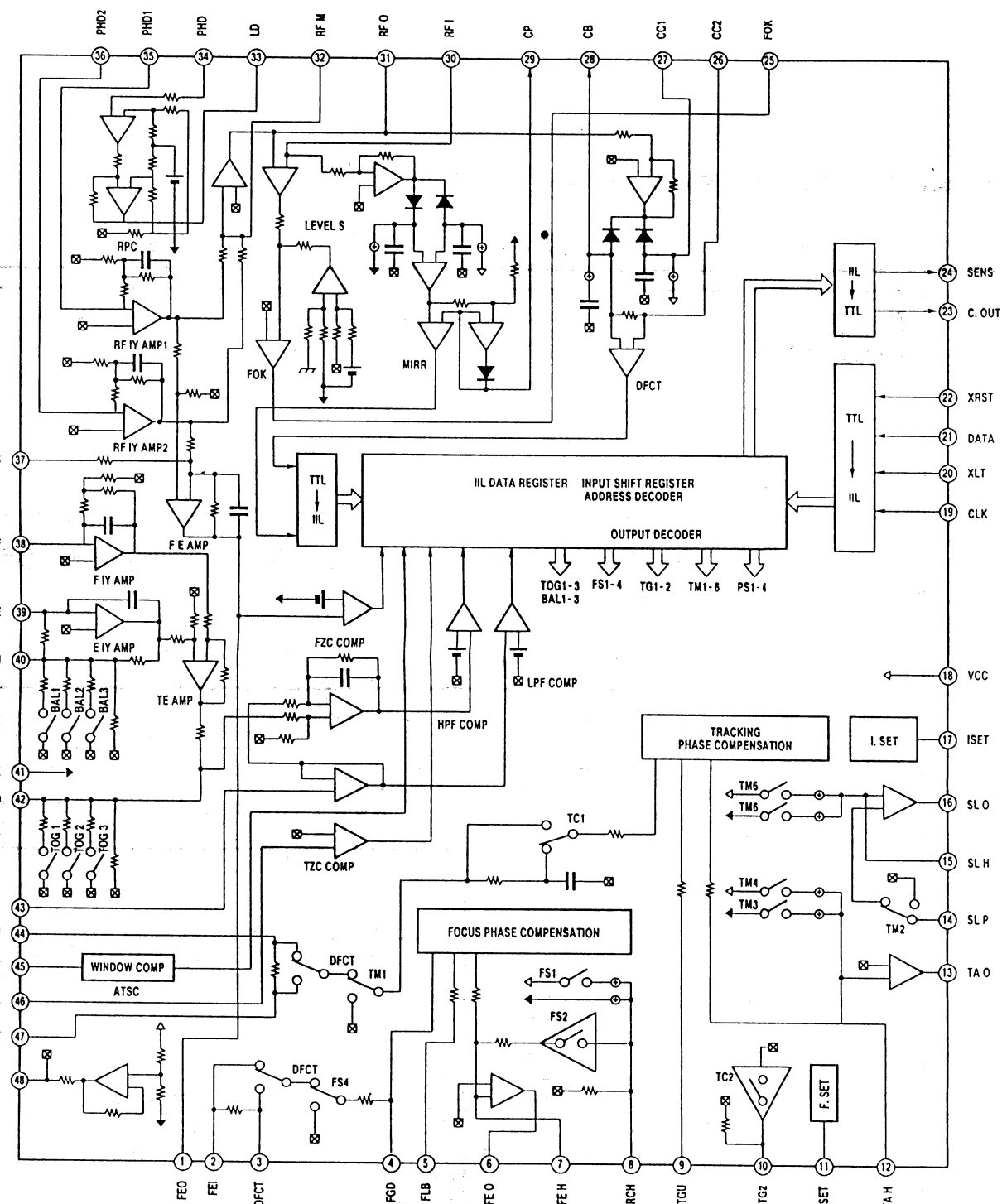


IC102 BA

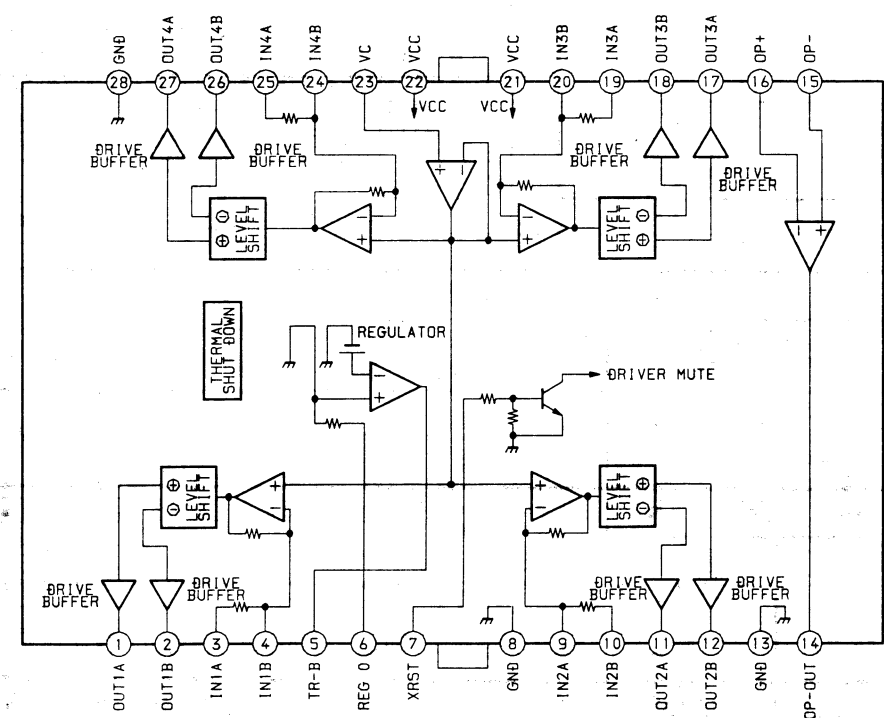


## • IC Block Diagrams.

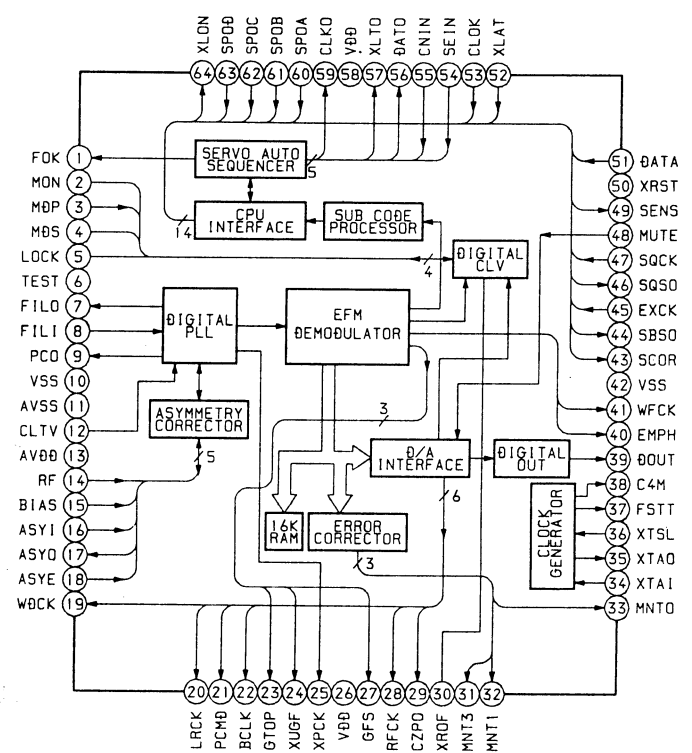
IC101 CXA1782BQ



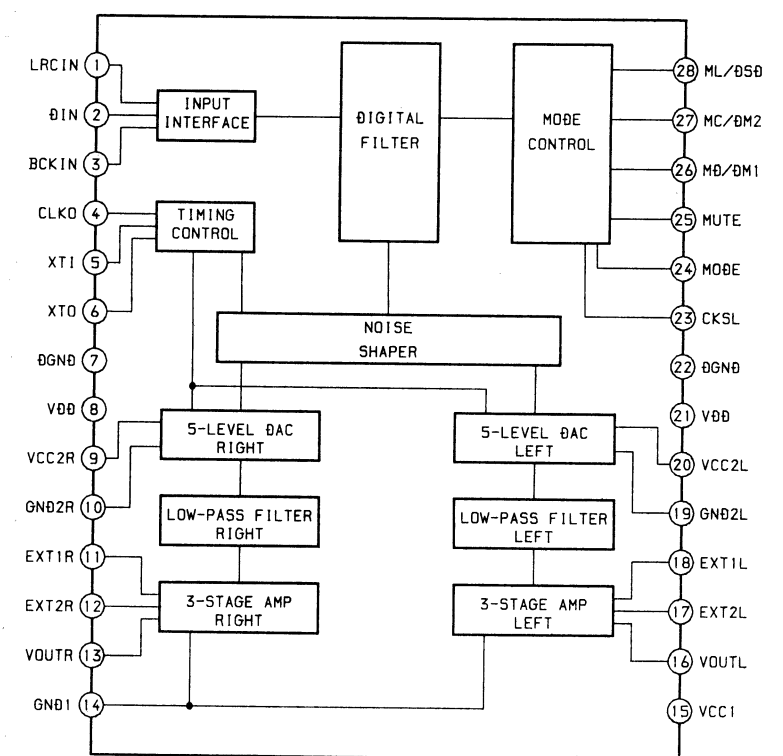
IC102 BA6397FP



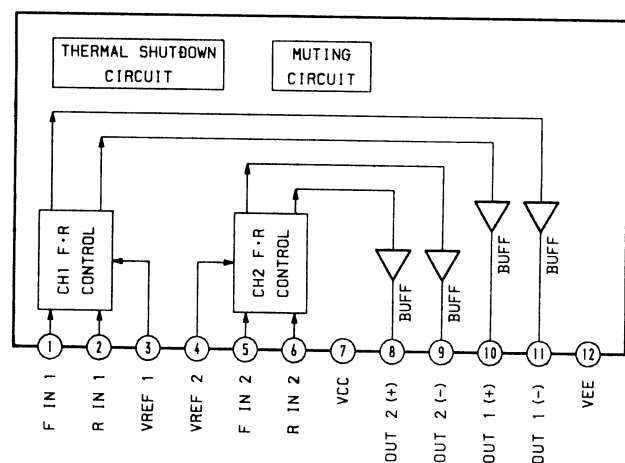
IC103 CXD2507



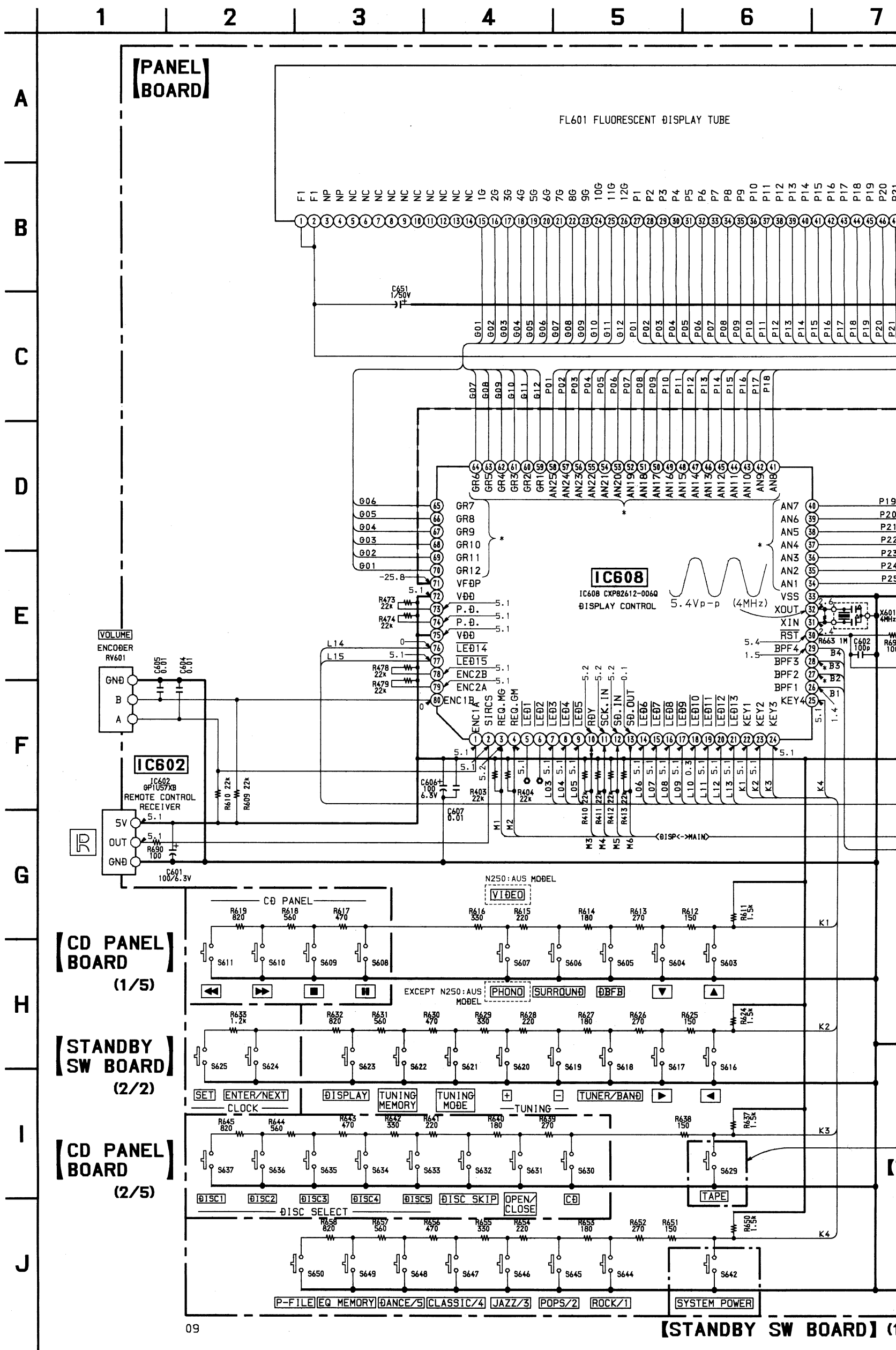
IC104 PCM1710U



IC301 BA6191



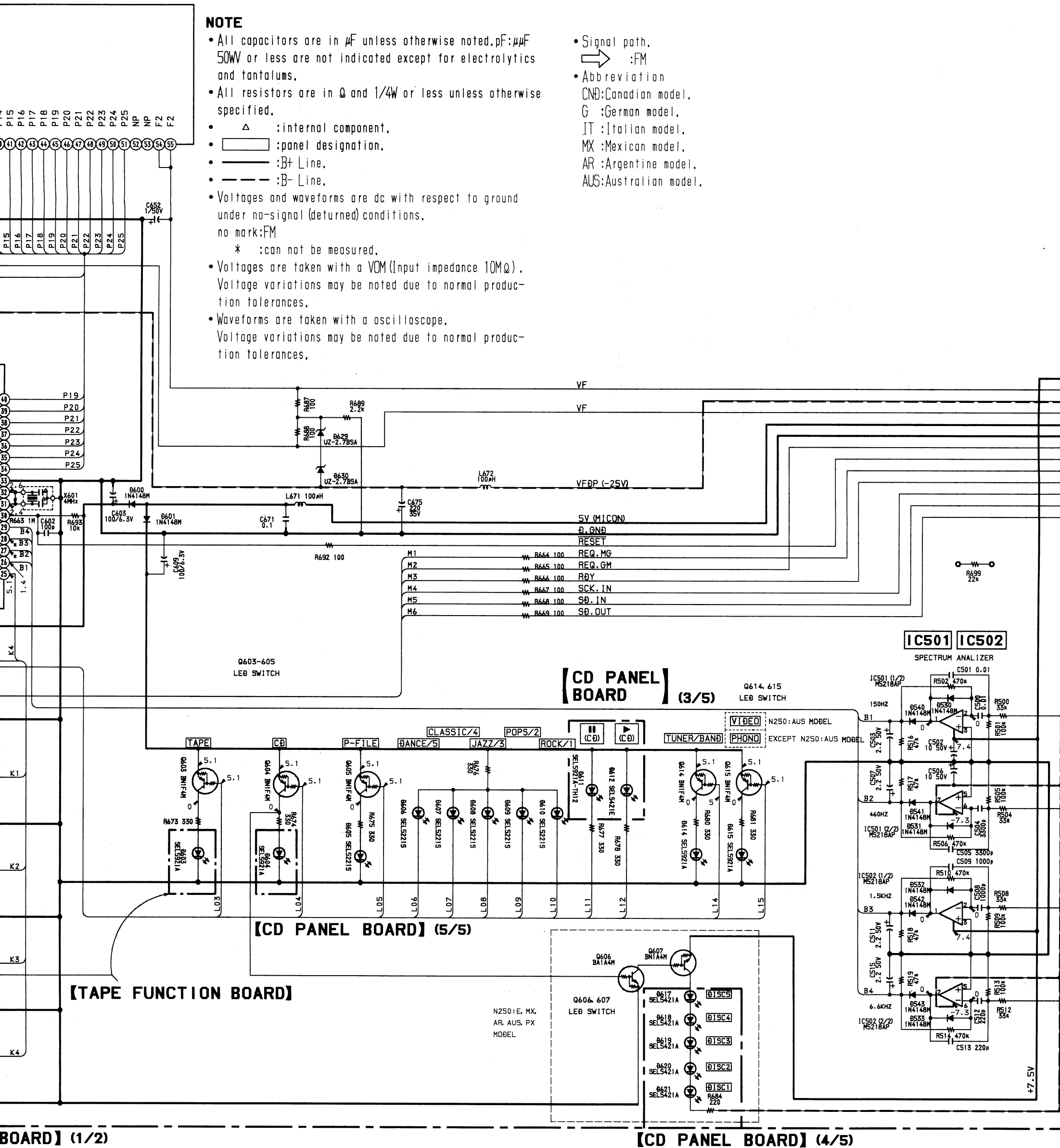
6-15. SCHEMATIC DIAGRAM — PANEL SECTION —

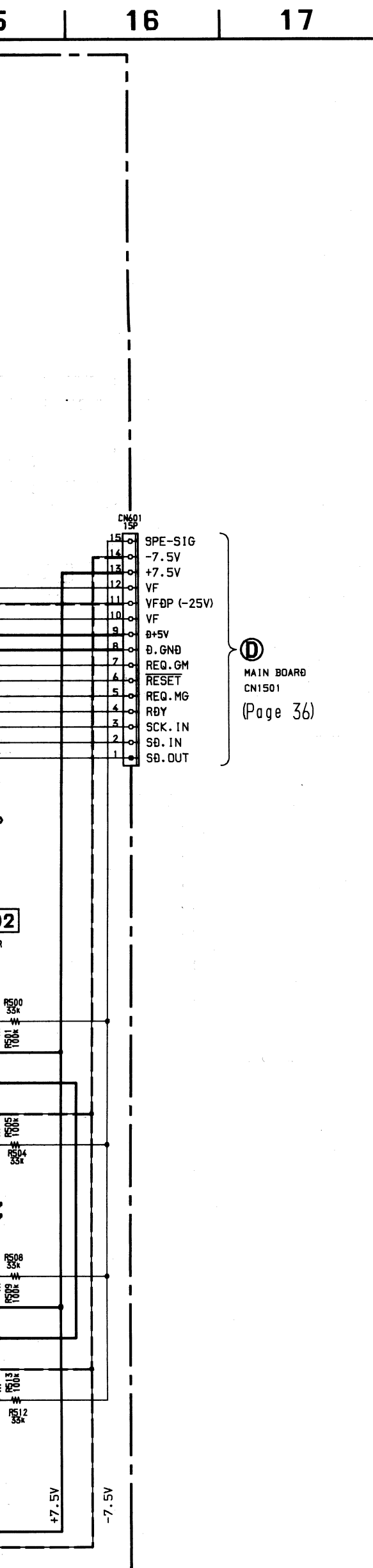


# NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted,  $\text{pF}:\mu\text{F}$  50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
- $\square$  : panel designation.
- $\text{---}$  : B+ Line.
- $\text{---}$  : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- \* : can not be measured.
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

- Signal path.
- $\rightarrow$  : FM
- Abbreviation
- CND: Canadian model.
- G : German model.
- IT : Italian model.
- MX : Mexican model.
- AR : Argentine model.
- AUS: Australian model.





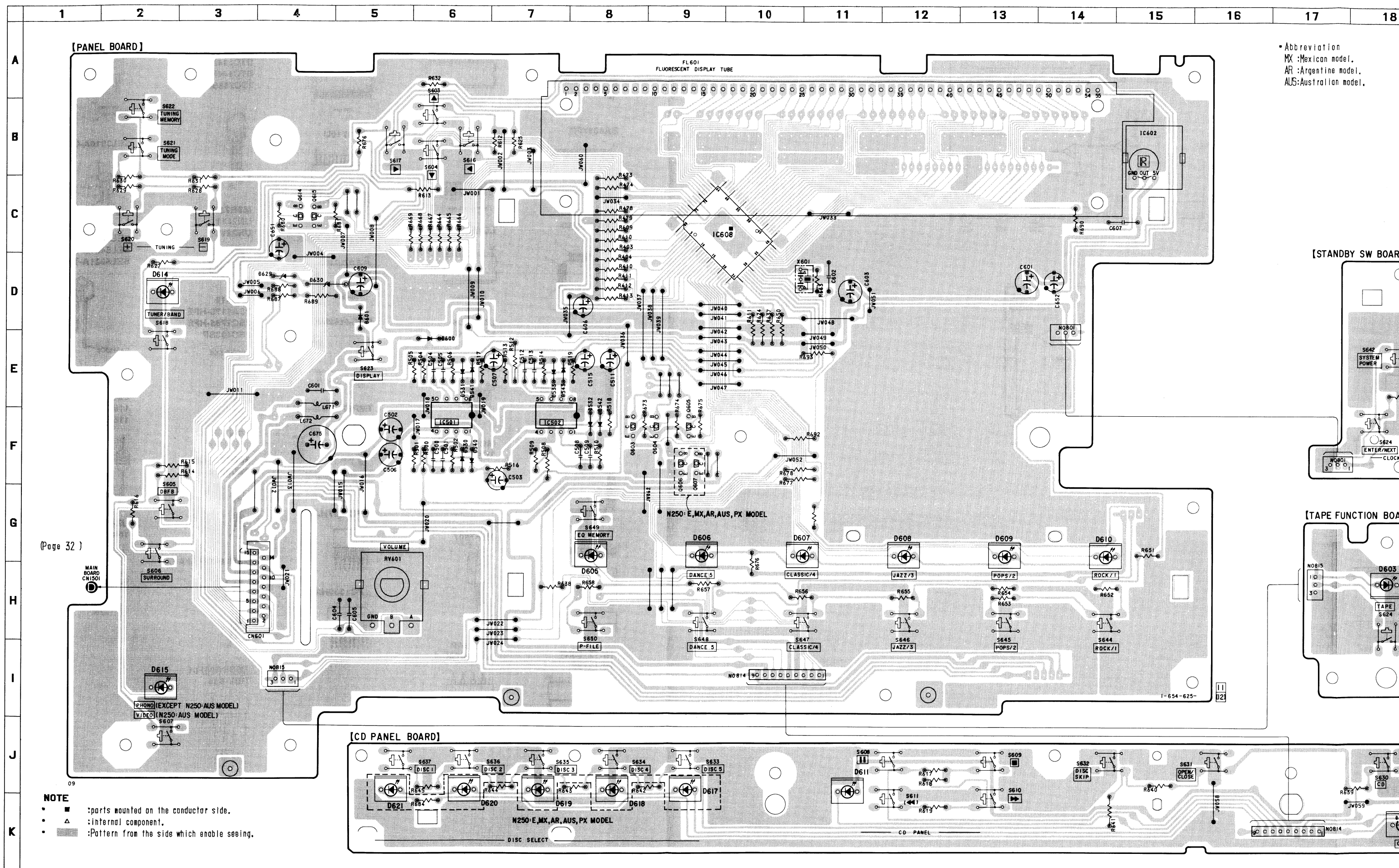
• IC608 GRAPHIC CONTROL (CXP82612-006Q) IC PIN FUNCTIONS

Pin No.	Pin Name	I/O	Function
1	ENC1A	I	Volume encoder signal input.
2	SIRCS	I	SIRCS signal input.
3	REQ. MG	I	Request signal from master control.
4	REQ. GM	O	Request signal to master control.
5, 6	LED1, 2	O	LED drive signal output. (Not used.)
7-9	LED3-5	O	LED drive signal output.
10	RDY	I/O	RDY signal from/to master control.
11	SCK IN	I	Serial clock input.
12	SD IN	I	Serial data input.
13	SD OUT	O	Serial data output.
14-21	LED6-13	O	LED drive signal output.
22-25	KEY1-4	I	Key matrix input.
26-29	BPF1-4	I	Spectram analyzer signal input.
30	RST	I	Reset signal input.
31	X IN	I	X'tal (4MHz).
32	X OUT	O	
33	Vss	-	GND
34-58	AN1-25	O	FL segment signal output.
59-70	GR1-12	O	FL grid signal output.
71	VFDP	-	-25V for FL
72	VDD	-	+5V
73, 74	PD	I	Not used. (Pull up)
75	VDD	-	+5V
76, 77	LED14, 15	O	LED drive signal output.
78, 79	ENC2B, A	I	Not used. (Pull up)
80	ENC1B	I	Volume encoder signal input.



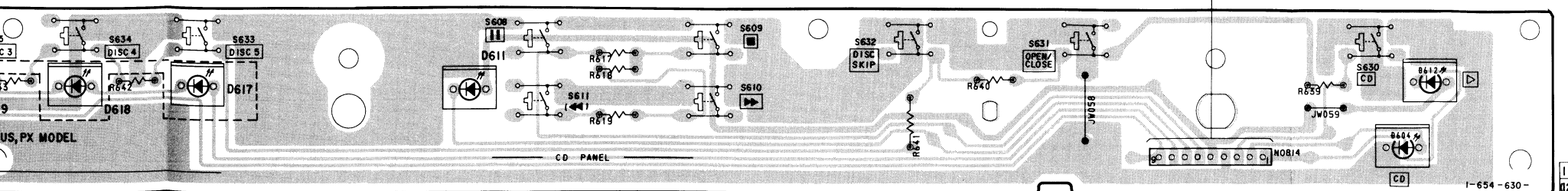
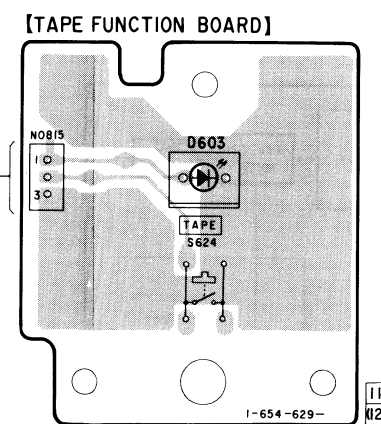
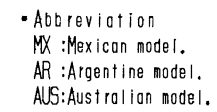
# 6-16. PRINTED WIRING BOARD — PANEL SECTION —

- See page 17 for Circuit Boards Location.
- See page 64 for Semiconductor Lead Layouts.



• Abbreviation  
MX :Mexican model.  
AR :Argentine model.  
AUS:Australian model.

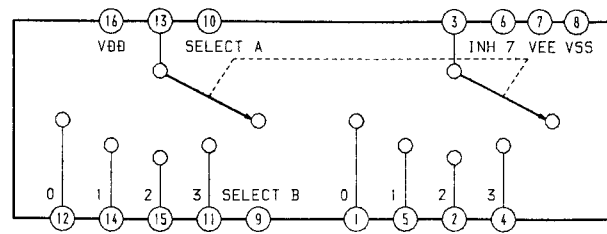




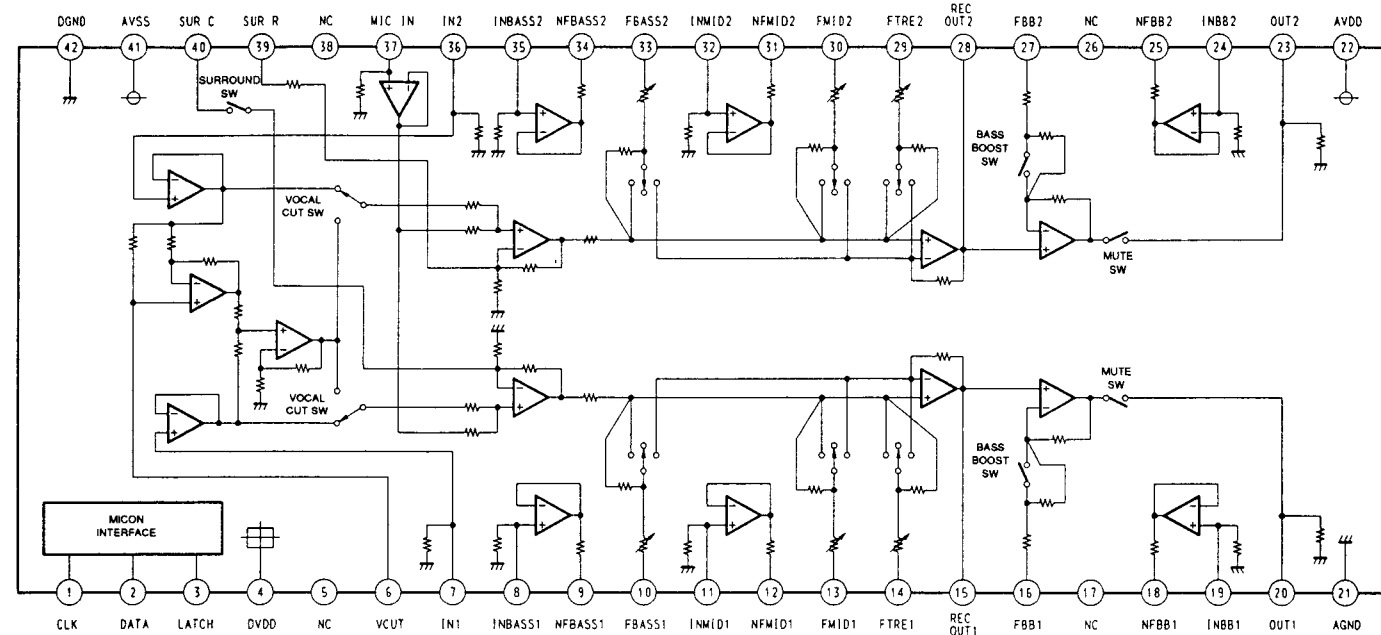
Ref. No.	Location
D530	F-6
D531	E-6
D532	F-8
D533	E-7
D540	F-6
D541	E-6
D542	F-8
D543	E-7
D600	E-6
D601	D-5
D603	H-18
D604	K-18
D605	H-8
D606	G-9
D607	G-11
D608	G-12
D609	G-13
D610	G-14
D611	J-11
D612	J-18
D614	D-2
D615	I-2
D617	J-9
D618	J-8
D619	J-7
D620	J-6
D621	J-5
D629	D-4
D630	D-4
IC501	F-6
IC502	F-7
IC602	B-15
IC608	C-10
Q603	E-8
Q604	F-9
Q605	F-9
Q606	F-9
Q607	F-9
Q614	C-4
Q615	C-4

## 6-17. IC BLOCK DIAGRAMS (MAIN SECTION)

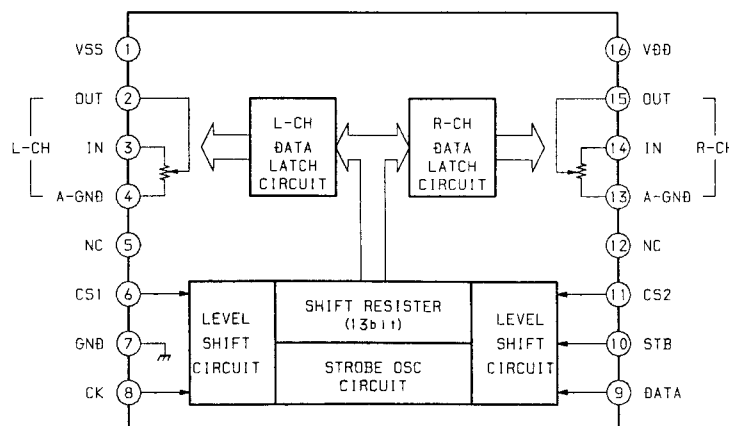
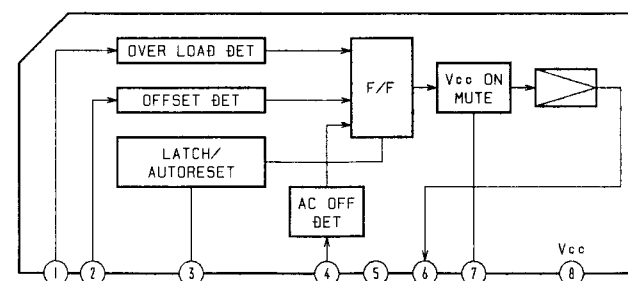
IC1002 MC14052BCP



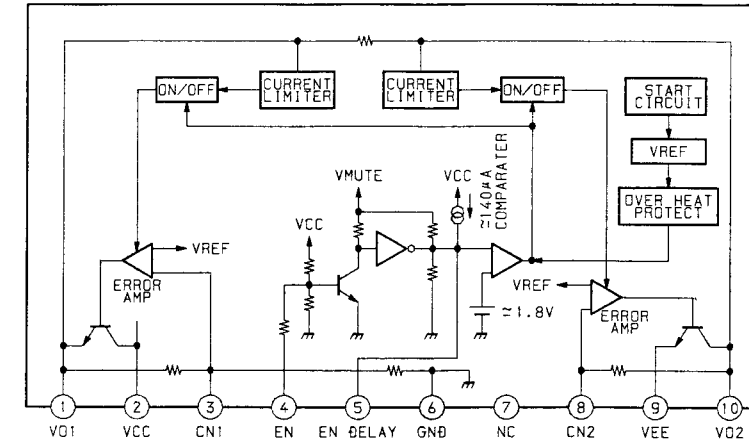
IC1101 M62423FP



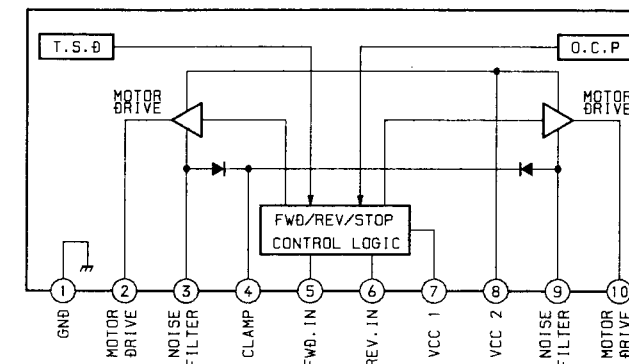
IC1131 TC9210P

IC1202  $\mu$ PC1237HA

IC1351 LA5617



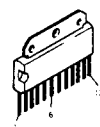
IC1901 LB1641



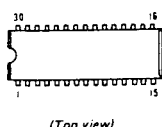


## 6-18. SEMICONDUCTOR LEAD LAYOUTS

**BA6191**

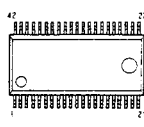


**LA1835**



(Top view)

**M62423FP**

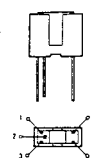


(TOP VIEW)

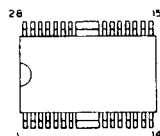
**DTA124ES  
DTA144ES  
DTC114ES  
DTC144ES  
2SC2669-OY**



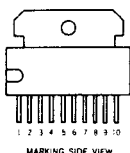
**GP-1A521**



**BA6397FP**

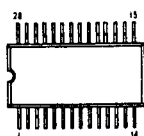


**LA5617**



MARKING SIDE VIEW

**PCM1710U**

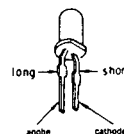


(TOP VIEW)

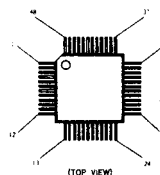
**MSB710  
UN2111  
UN2211**



**SEL3910A-CD**

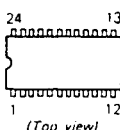


**CXA1782BQ**



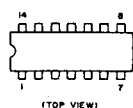
(TOP VIEW)

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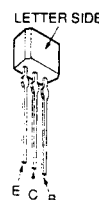
(Top view)

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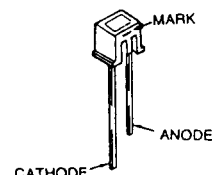


(TOP VIEW)

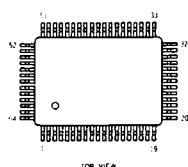
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2SC2785-HFE  
2SC403SP**



**SEL5221S-TH8F  
SEL5421E-TH8F  
SEL5921A-TH8F**

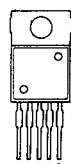


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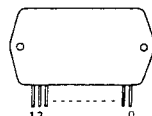


TOP VIEW

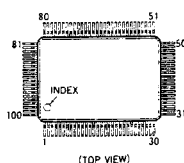
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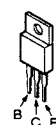


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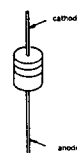


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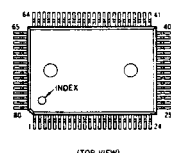
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2SD2012**



**UZ-2.7BSA  
UZ-5.6BSB  
UZL-11M1  
11EQS04  
11ES2**

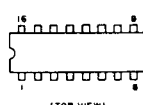


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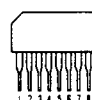
(TOP VIEW)

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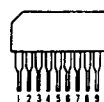


(TOP VIEW)

**μPC1237HA**



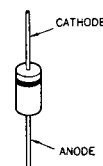
**μPC1330HA**



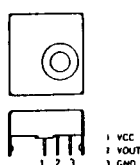
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**UZ-27BS  
1N4148M**

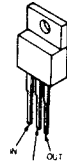


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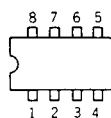


1 VCC  
2 VOUT  
3 GND

**M5F7807**

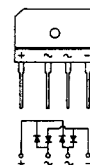


**M5218AP  
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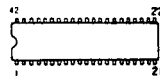


(Top view)

**D5SBA20F01  
RBV-604**



**HA12195NT  
HA12196**






(Top view)

SECTION 7  
EXPLODED VIEWS

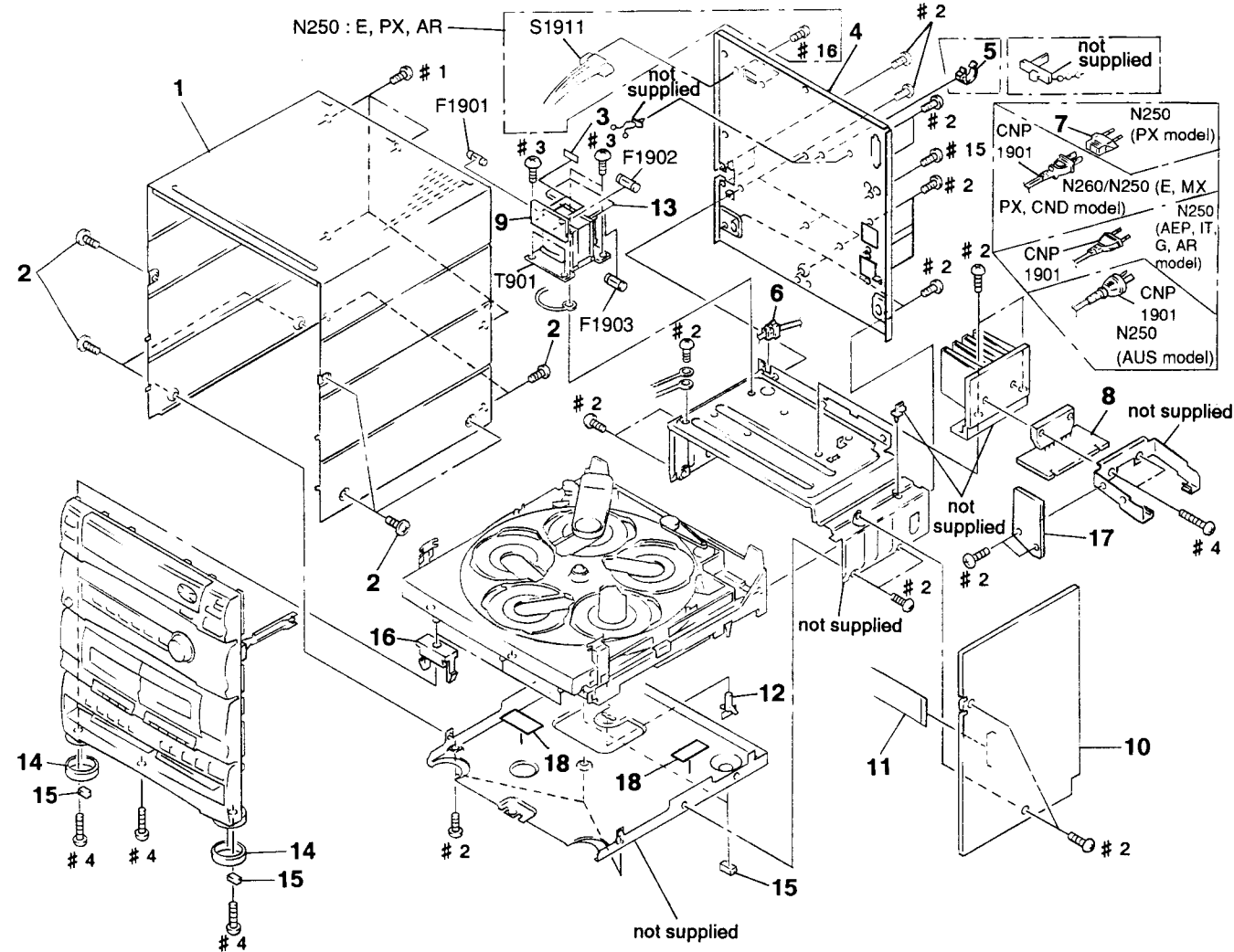
NOTE:

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation  
CND : Canadian model  
G : German model  
IT : Italian model  
MX : Mexican model  
AUS : Australian model  
AR : Argentine model  
AEP1 : AEP model without power source for PS-LX56P.  
AEP2 : AEP model with power source for PS-LX56P.

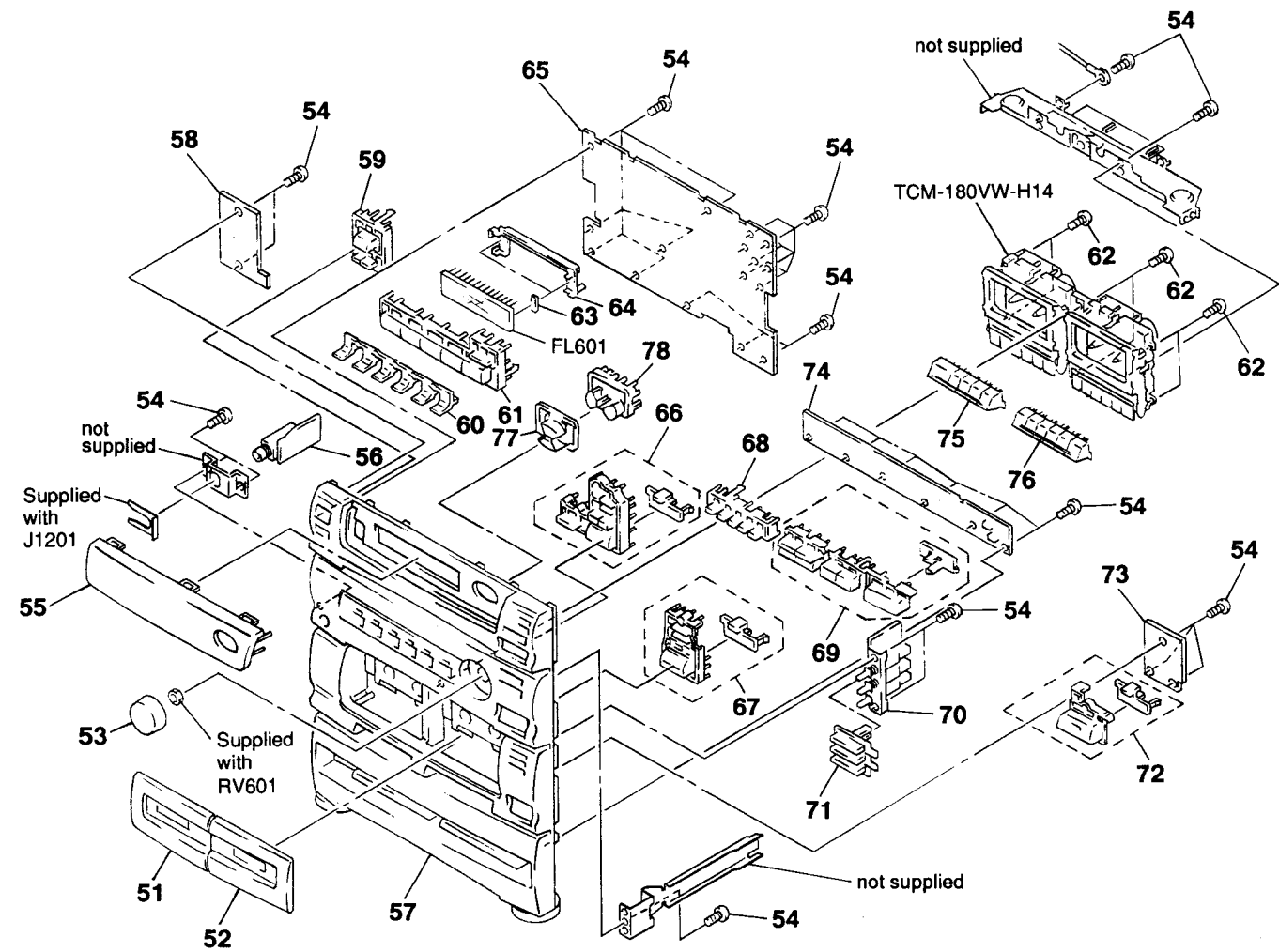
The components identified by mark  or dotted line with mark  are critical for safety.  
Replace only with part number specified.  
Les composants identifiés par une marque  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CHASSIS SECTION



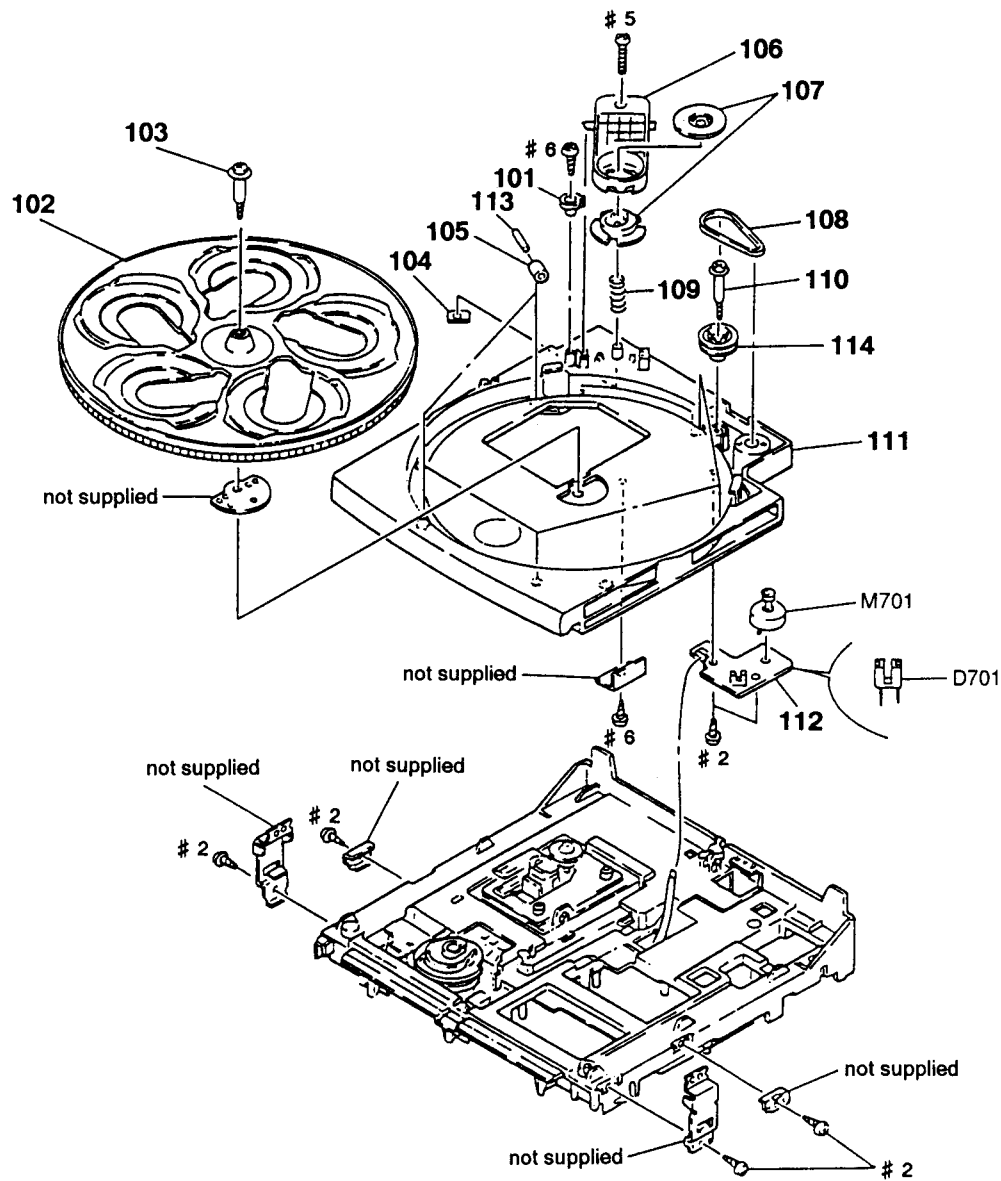
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-965-091-51	CASE (CDM)		* 10	A-4377-459-A	MAIN BOARD, COMPLETE (N250:PX)	
2	3-363-099-01	SCREW (CASE 3 TP2)		* 10	A-4377-592-A	MAIN BOARD, COMPLETE (N250:G)	
* 3	3-701-946-26	LABEL, FUSE RATING (D260/N250:CND)		* 10	A-4377-594-A	MAIN BOARD, COMPLETE (N250:IT)	
* 4	4-969-782-01	PANEL, BACK (D260)		* 10	A-4377-803-A	MAIN BOARD, COMPLETE (D260)	
* 4	4-969-782-11	PANEL, BACK (N250:CND)		* 10	A-4378-100-A	MAIN BOARD, COMPLETE (N250:AUS)	
* 4	4-969-782-41	PANEL, BACK (N250:AEP2)		11	1-765-333-11	WIRE (FLAT TYPE) (15 CORE)	
* 4	4-969-782-61	PANEL, BACK (N250:AEP1)		12	4-937-945-01	PLATE (TRANSPORT), LOCK	
* 4	4-969-782-81	PANEL, BACK (N250:IT)		* 13	1-655-288-11	POWER (B) BOARD	
* 4	4-969-782-91	PANEL, BACK (N250:G)		14	4-921-918-11	PLATE, ORNAMENTAL	
* 4	4-970-161-01	PANEL, BACK (N250:E)		15	4-948-236-01	CUSHION (107) (N250:CND, AEP1, IT, AUS)	
* 4	4-970-161-11	PANEL, BACK (N250:AR)		* 16	4-962-705-21	CHASSIS, HOLDER	
* 4	4-970-161-21	PANEL, BACK (N250:AUS)		* 17	A-4377-985-A	DBFB BOARD, COMPLETE (N250:E, MX, AR, AUS, PX)	
* 4	4-970-161-31	PANEL, BACK (N250:MX)					
* 4	4-970-161-41	PANEL, BACK (N250:PX)		18	4-974-698-01	INSULATING SHEET	
* 5	4-949-235-01	HOOK (N250:CND)		△CNP19011-558-943-41	CORD, POWER (N250:E, MX, PX)		
* 5	4-949-235-11	HOOK (D260/N250:AEP, E, IT, G, MX, AR, PX)		△CNP19011-575-651-21	CORD, POWER (N250:AEP, IT, G, AR)		
6	3-703-244-00	BUSHING (FBS001), CORD (D260/N250:CND, AEP, IT, G, AR, AUS)		△CNP19011-590-926-11	CORD, POWER (D260/N250:CND)		
6	4-966-266-01	BUSHING (S) (FBS002), CORD (N250:E, MX, PX)		△CNP19011-696-845-11	CORD, POWER (N250:AUS)		
△7	1-569-007-11	ADAPTER, CONVERSION 2P (N250:PX)		△F1901	1-532-350-00	FUSE TIME LAG (T4A 250V) (N250:AEP, E, IT, G, MX, AR, AUS, PX)	
* 8	A-4371-959-A	POWER AMPLIFIER BOARD, COMPLETE (N250:E, MX, AR, AUS, PX)		△F1901	1-576-108-11	FUSE (4A 125V) (D260/N250:CND)	
* 8	A-4371-977-A	POWER AMPLIFIER BOARD, COMPLETE (N250:CND, AEP, IT, G)		△F1902	1-532-350-00	FUSE TIME LAG (T4A 250V) (N250:AEP, E, IT, G, MX, AR, AUS, PX)	
* 8	A-4377-808-A	POWER AMP BOARD, COMPLETE (D260)		△F1902	1-576-108-11	FUSE TIME LAG (4A 125V) (D260/N250:CND)	
* 9	1-655-287-11	POWER (A) BOARD		△F1903	1-576-107-11	FUSE TIME LAG (3.15A 125V) (D260/N250:CND)	
* 10	A-4371-914-A	MAIN BOARD, COMPLETE (N250:CND)		△S1911	1-570-046-21	SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR) (N250:E, PX, AR)	
* 10	A-4371-940-A	MAIN BOARD, COMPLETE (N250:AEP2)		△T901	1-427-687-11	TRANSFORMER, POWER (N250:AEP, IT, G)	
* 10	A-4371-948-A	MAIN BOARD, COMPLETE (N250:AR)		△T901	1-427-688-11	TRANSFORMER, POWER (N250:E, MX, AR, AUS, PX)	
* 10	A-4377-204-A	MAIN BOARD, COMPLETE (N250:E, MX)		△T901	1-427-689-11	TRANSFORMER, POWER (N250:CND)	
* 10	A-4377-253-A	MAIN BOARD, COMPLETE (N250:AEP1)		△T901	1-427-921-11	TRANSFORMER, POWER (D260)	

7-2. FRONT PANEL SECTION



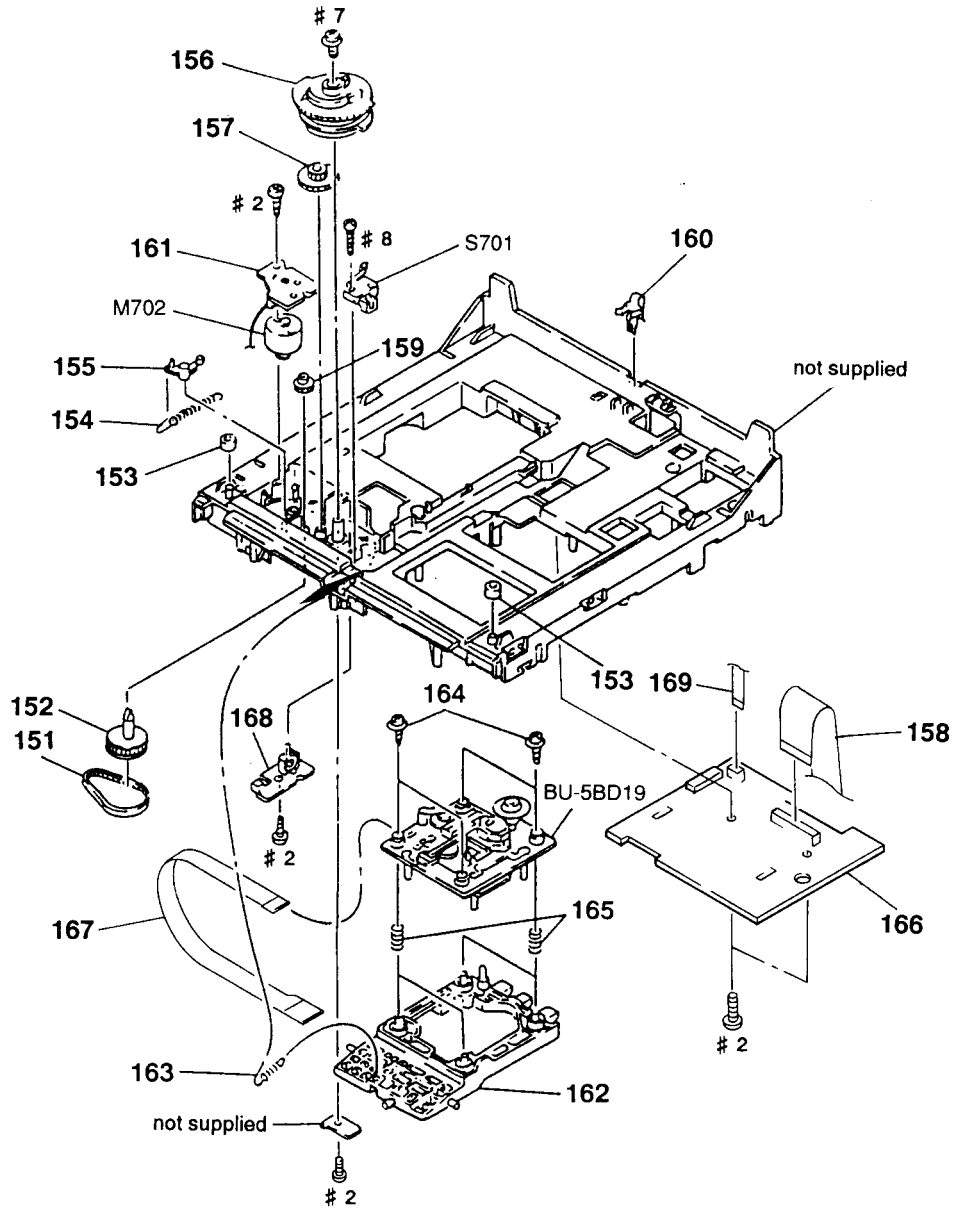
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-4945-503-1	LID (A) ASSY, CASSETTE		66	X-4945-409-1	BUTTON (ST) ASSY	
52	X-4945-504-1	LID (B) ASSY, CASSETTE		67	X-4945-410-1	BUTTON (TA) ASSY	
53	4-969-683-01	KNOB (V)				(D260/N250:CND, E, MX, AR, PX)	
54	4-951-620-01	SCREW (2.6X8), +BVTP		67	X-4945-609-1	BUTTON (TA) ASSY (N250:AEP, IT, G)	
55	4-969-677-01	PLATE (ST), INDICATION		67	X-4945-875-1	BUTTON (TA) ASSY (N250:AUS)	
* 56	1-654-627-11	H. P. BOARD		68	4-970-716-01	BUTTON (5 DISC) (D260/N250:CND, AEP, IT, G)	
57	4-969-656-01	PANEL, FRONT (D260)		68	4-970-717-01	BUTTON (5 DISC-W) (N250:E, MX, AR, AUS, PX)	
57	4-969-656-11	PANEL, FRONT (N250:CND, AEP, IT, G)		69	X-4945-412-1	BUTTON (CDM) ASSY	
57	4-969-656-21	PANEL, FRONT (N250:E, MX, AR, AUS, PX)		* 70	1-654-628-11	SW BOARD	
* 58	1-654-626-11	STANDBY SW BOARD		71	4-964-288-11	BUTTON (DDT-3)	
				72	X-4945-411-1	BUTTON (TC) ASSY	
59	4-969-665-01	BUTTON (POWER)		* 73	1-654-629-11	TAPE FUNCTION BOARD	
60	4-969-684-01	INDICATOR (SE5)		* 74	1-654-630-11	CD PANEL BOARD	
61	4-969-670-01	BUTTON (SELECT 5)		75	4-969-673-01	BUTTON (MD-A)	
		(D260/N250:CND, AEP, E, IT, G, MX, AR, AUS)		76	4-969-674-01	BUTTON (MD-B)	
61	4-969-670-11	BUTTON (SELECT 5) (N250:PX)		77	4-969-666-01	BUTTON (CURSOR 1)	
62	4-951-620-11	SCREW (2.6X10), +BVTP		78	4-969-667-01	BUTTON (CURSOR 2)	
* 63	4-949-935-21	CUSHION (FL)		FL601	1-517-341-11	INDICATOR TUBE, FLUORESCENT	
* 64	4-969-681-01	HOLDER, FL TUBE					
* 65	A-4371-913-A	PANEL BOARD, COMPLETE (D260/N250:CND)					
* 65	A-4371-932-A	PANEL BOARD, COMPLETE (N250:AEP, IT, G)					
* 65	A-4371-947-A	PANEL BOARD, COMPLETE					
		(N250:E, MX, AR, AUS, PX)					

7-3. TRAY SECTION



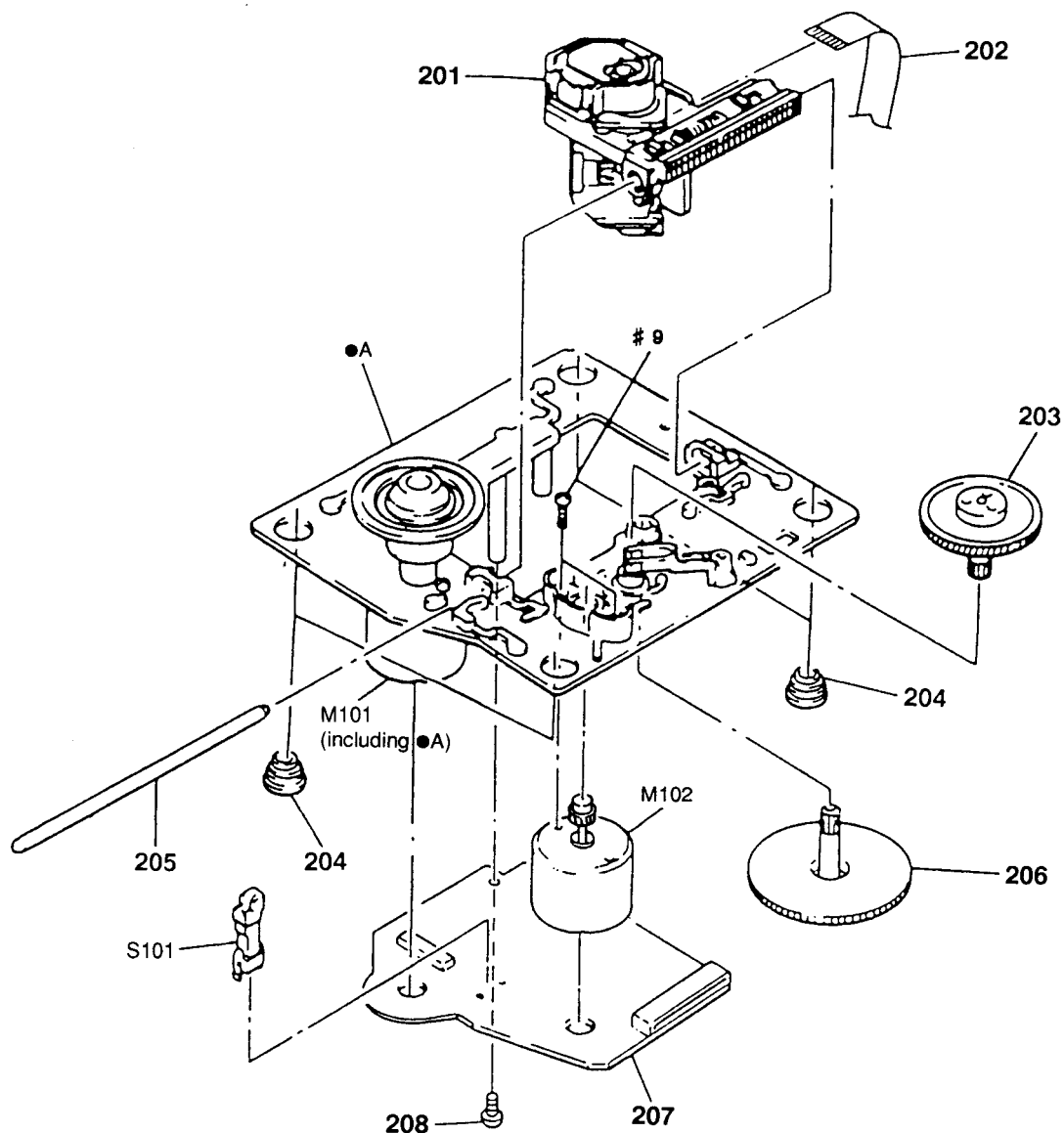
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 101	4-949-226-01	PLATE, LOCK		110	4-923-597-01	SCREW, STEP	
* 102	4-926-383-01	TABLE (B), DISK		111	4-955-787-72	TABLE, DISC	
103	4-926-384-01	SCREW, STEP		* 112	1-638-729-11	TABLE MOTOR BOARD	
* 104	4-926-388-01	BRACKET (ADJUSTMENT)		113	4-934-376-01	SHAFT (ROLLER)	
105	X-4924-457-1	ROLLER ASSY		114	4-934-380-01	PULLEY (R)	
* 106	4-930-506-02	BRACKET (PRESS PULLEY)		D701	8-719-970-19	DIODE GP-1A521	
* 107	1-452-538-11	MAGNET		M701	A-4353-976-A	MOTOR ASSY, ROTARY	
108	4-926-399-01	BELT					
109	4-926-395-01	SPRING, COMPRESSION					



#### 7-4. CD CHASSIS SECTION





<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
151	4-944-490-01	BELT (TIMING)		* 162	4-934-373-01	BRACKET (BU)	
152	X-4941-529-1	PULLEY ASSY		163	4-937-911-01	SPRING, TENSION	
* 153	4-951-619-01	CUSHION (A)		164	4-933-134-01	SCREW (+PTPHW M2. 6X6)	
154	4-924-412-01	SPRING (B), TENSION		165	4-958-593-01	SPRING (BU), COMPRESSION	
155	4-917-519-01	LEVER, SET					
156	4-934-391-01	GEAR (LOADING A)		* 166	A-4371-911-A	CD MAIN BOARD, COMPLETE	
157	4-934-381-01	GEAR (LOADING C)		167	1-654-751-11	FLEXIBLE BOARD	
158	1-769-303-11	WIRE (FLAT TYPE) (29 CORE)		* 168	1-638-731-11	OPEN/UP SW BOARD	
159	4-934-375-11	GEAR (LOADING B)		169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
* 160	4-943-996-06	SPRING, LEAF		M702	A-4353-974-A	MOTOR ASSY, LOADING	
* 161	1-638-288-11	LOADING MOTOR BOARD		S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	

# 7-5. BASE UNIT SECTION (BU-5BD19)

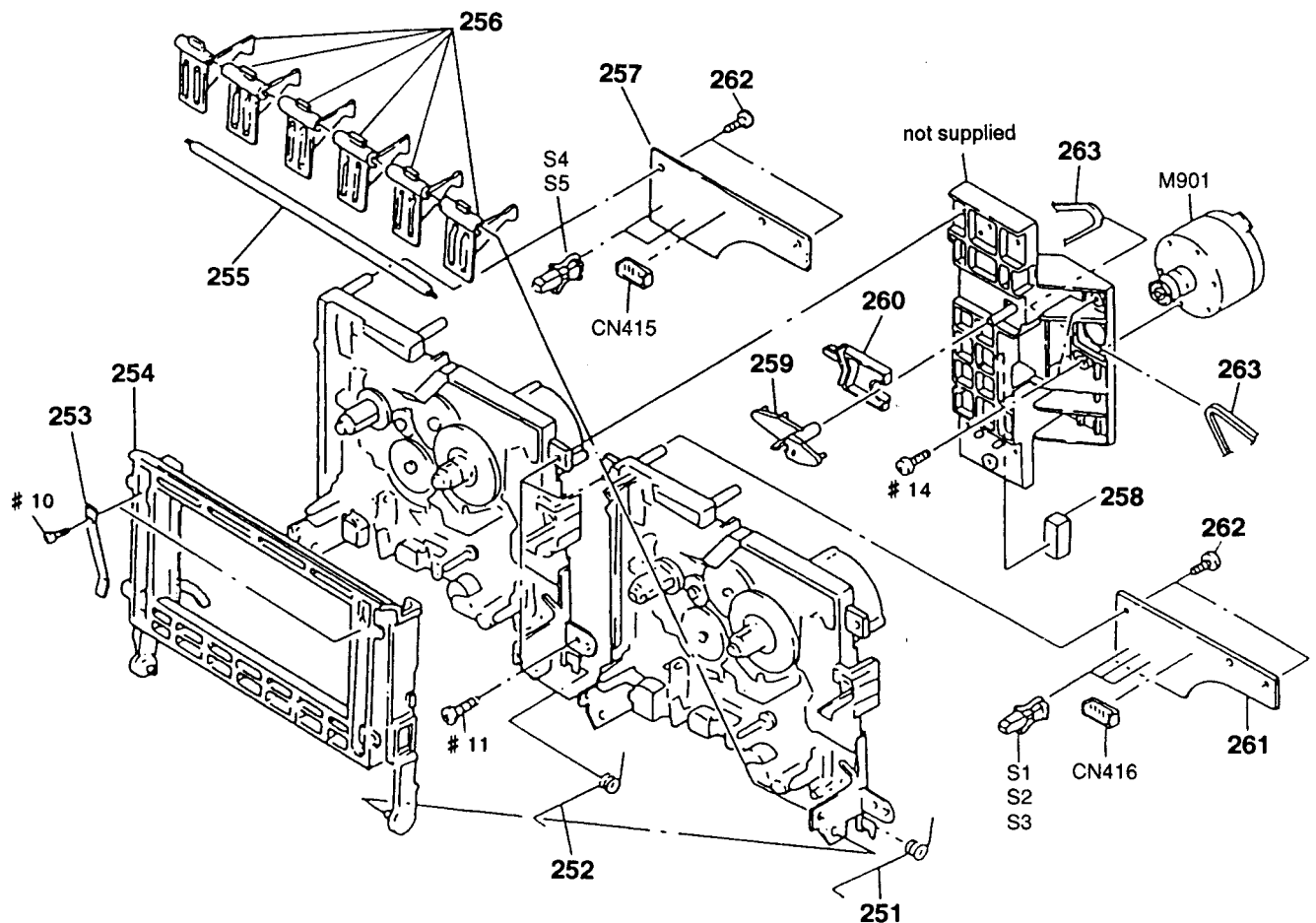


The components identified by mark  or dotted line with mark  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

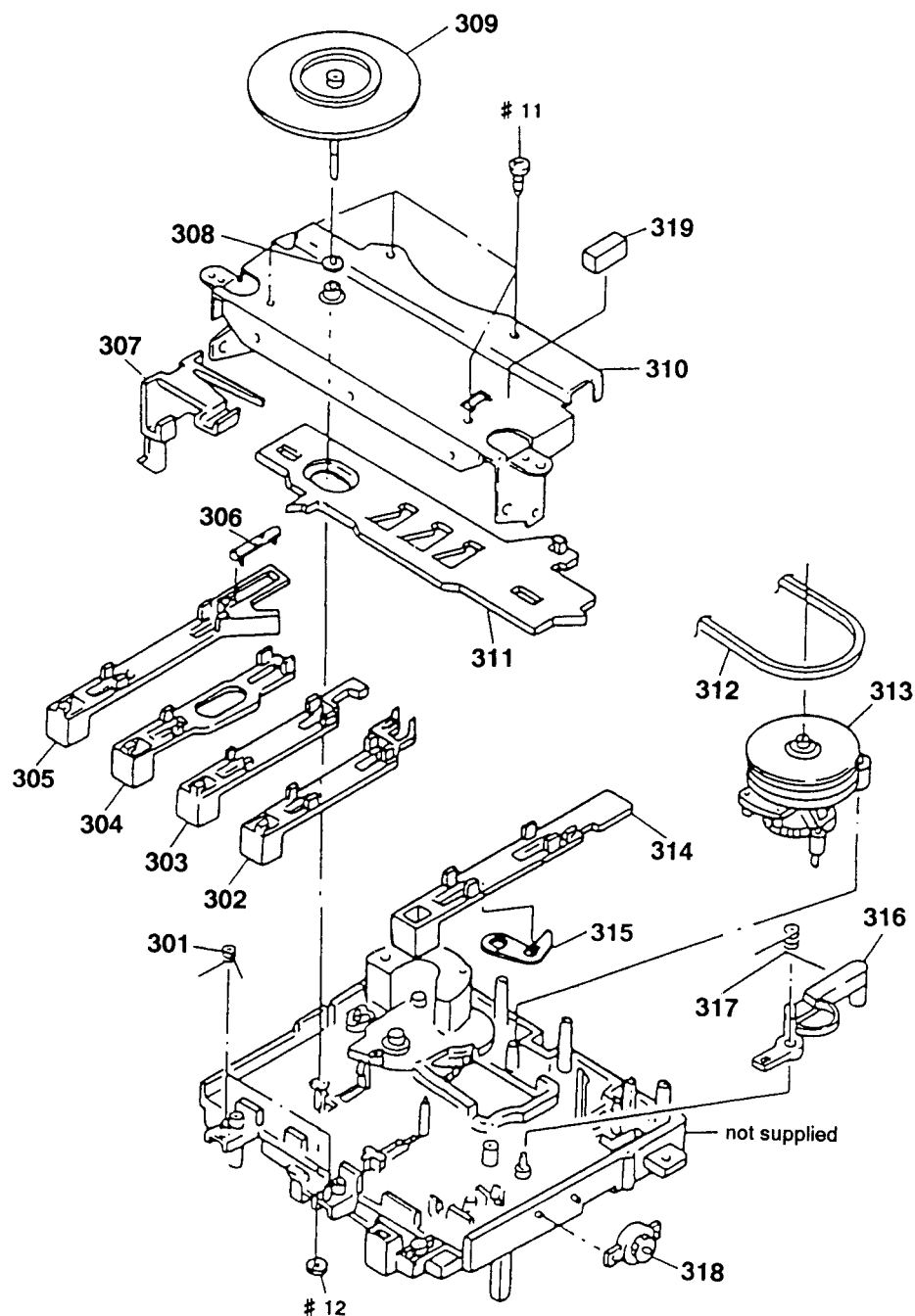
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
 201	8-848-387-01	OPTICAL PICK-UP BLOCK (KSS-213BA/S-N)		* 207	A-4673-402-A	BD BOARD, COMPLETE	
202	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)		208	4-951-620-01	SCREW (2.6X8), +BVTP	
203	4-917-567-21	GEAR (M)		M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
204	4-951-940-01	INSULATOR (BU)		M102	X-4917-504-1	MOTOR ASSY (SLED)	
205	4-917-565-01	SHAFT, SLED		S101	1-572-085-11	SWITCH, LEAF	
206	4-917-564-01	GEAR (P), FLATNESS					

**7-6. MECHANISM DECK SECTION 1**  
(TCM-180VW-H14)



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
251	3-358-287-01	SPRING (LOADING A), TORSION		262	4-951-620-01	SCREW (2.6X8), +BVTP	
252	3-358-229-01	SPRING (LOADING), TORSION		263	3-364-777-01	BELT (WH)	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF		* CN415	1-568-942-11	PIN, CONNECTOR 4P	
254	3-358-266-02	HOLDER, CASSETTE		* CN416	1-568-943-11	PIN, CONNECTOR 5P	
255	3-371-917-01	SHAFT (BUTTON SHAFT 4)					
256	3-369-335-01	LEVER (BUTTON BASE F)		M901	X-3362-377-1	MOTOR (WH) ASSY (REEL/CAPSTAN)	
* 257	1-640-702-11	LEAF SW (A) BOARD		S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
* 258	3-358-289-01	SPACER (VIBRATION PROOF MAT)		S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
259	3-358-203-01	LEVER (TRIGGER)		S3	1-571-736-11	SWITCH, LEAF (REC B)	
260	3-358-202-01	SLIDER (TRIGGER)		S4	1-571-736-11	SWITCH, LEAF (MOTOR A)	
* 261	1-640-703-11	LEAF SW (B) BOARD		S5	1-571-736-11	SWITCH, LEAF (PLAY A)	

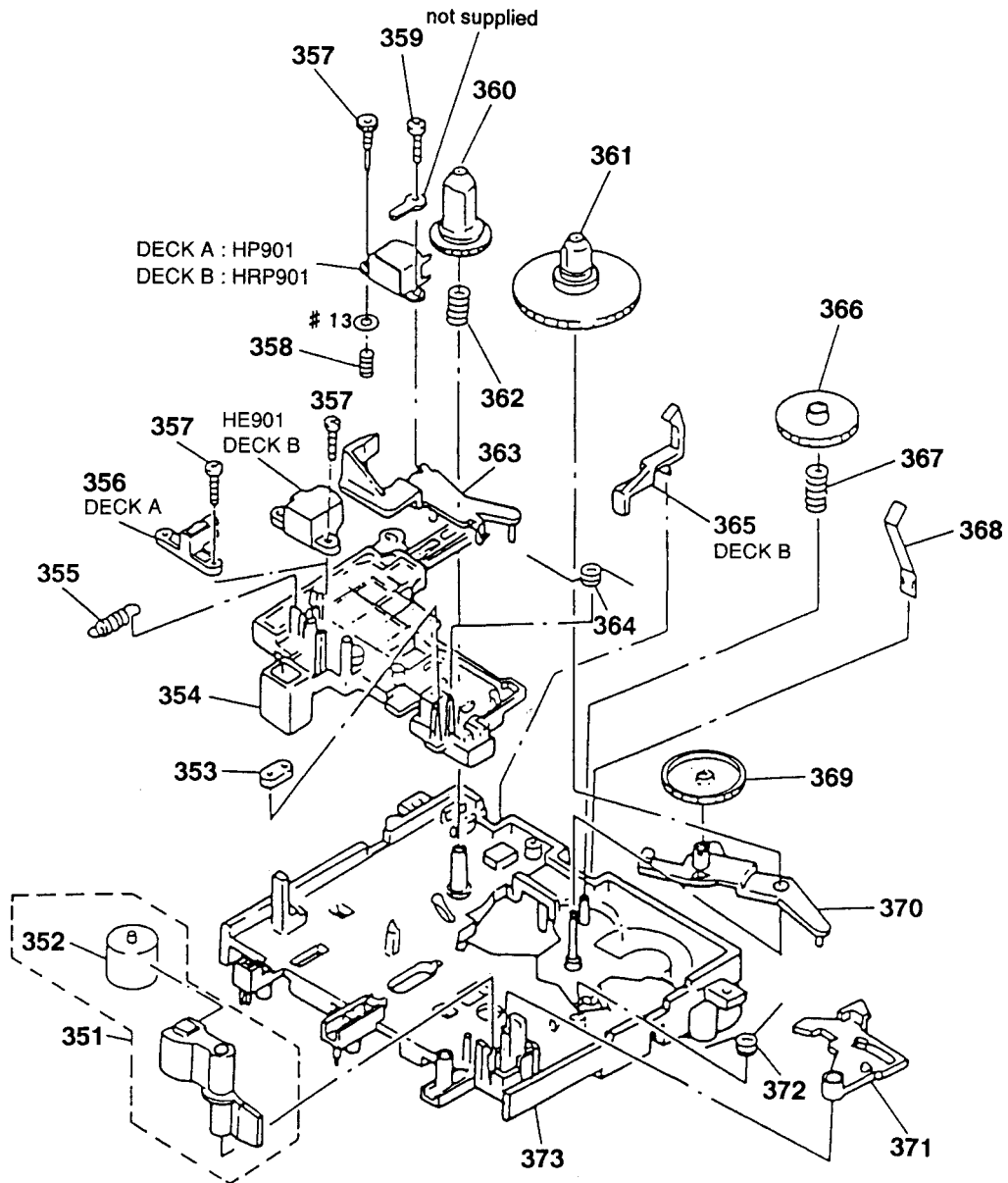
**7-7. MECHANISM DECK SECTION 2**  
(TCM-180VW-H14)



Ref.No.	Part No.	Description
301	3-358-232-01	SPRING (S-P F-R), TORSION
302	3-358-258-01	SLIDER (REW)
303	3-358-257-01	SLIDER (FF)
304	3-358-256-01	SLIDER (STOP/EJECT)
305	3-358-260-01	SLIDER (PAUSE)
* 306	3-358-226-01	LEVER (PAUSE LEVER)
* 307	3-358-261-02	SLIDER (HOLDER LOCK)
308	3-701-437-01	WASHER
309	X-3358-205-1	FLYWHEEL (A) ASSY (DECK B)
309	X-3366-859-1	FLYWHEEL (D) ASSY (DECK A)
310	X-3365-582-1	BRACKET (D) ASSY

Remark	Ref.No.	Part No.	Description	Remark
	* 311	3-358-249-01	SLIDER (LOCK PLATE)	
	312	3-358-230-01	BELT (A1)	
	313	X-3358-202-1	LEVER (FR ARM) ASSY	
	314	3-358-259-01	SLIDER (REC) (DECK B)	
	* 315	3-358-204-01	LEVER (REC SAFETY) (DECK B)	
	316	3-358-286-01	LEVER (MOTOR LEVER)	
	317	3-358-214-01	SPRING (LOCK), TORSION (DECK A)	
	317	3-358-233-01	SPRING (REC-LOCK), TORSION (DECK B)	
	318	3-319-224-51	DAMPER, SMALL	
	* 319	3-358-289-01	SPACER (VIBRATION PROOF MAT) (DECK B)	

### 7-8. MECHANISM DECK SECTION 3 (TCM-180VW-H14)



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY		* 365	3-358-255-01	LEVER (GB LEVER) (DECK B)	
352	3-578-143-11	PINCH ROLLER					
* 353	3-358-215-01	BUSHING (WIRE KIT RETAINER)		* 366	3-358-224-01	GEAR (FF GEAR)	
354	3-358-265-01	SLIDER (HEAD PC BOARD A)		367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
355	3-358-217-01	SPRING, TENSION		368	3-358-227-01	SPRING, LEAF	
				* 369	3-358-284-01	GEAR (TU GEAR)	
* 356	3-363-931-01	GUIDE, TAPE		* 370	3-358-252-01	LEVER (TU ARM)	
357	3-358-288-11	SCREW (T), AZIMUTH					
358	3-358-234-01	SPRING (AZIMUTH), COMPRESSION		* 371	3-358-253-01	LEVER (SHUT-OFF LEVER)	
359	3-358-288-01	SCREW (T), AZIMUTH		372	3-358-243-01	SPRING (TU-SHUT), TORSION	
360	3-358-248-01	GEAR (SUPPLY REEL)		373	X-3358-207-2	CHASSIS (A) ASSY	
				HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
361	X-3358-203-1	TABLE (T) ASSY, REEL		HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
362	3-358-208-01	SPRING (SUPPLY), COMPRESSION					
* 363	3-358-251-01	LEVER (TENSION DETECTION ARM)		HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	
364	3-358-228-01	SPRING, TORSION					



## SECTION 8

### ELECTRICAL PARTS LIST

## NOTE:

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable

- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB...,  
uPC...:  $\mu$  PC..., uPD...:  $\mu$  PD...
- CAPACITORS  
uF:  $\mu$  F
- COILS  
uH:  $\mu$  H
- Abbreviation  
CND : Canadian model  
G : German model  
IT : Italian model  
MX : Mexican model  
AUS : Australian model  
AR : Argentine model  
AEP1 : AEP model without power source  
for PS-LX56P  
AEP2 : AEP model with power source  
for PS-LX56P

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4673-402-A	BD BOARD, COMPLETE		C136	1-164-005-11	CERAMIC CHIP 0.47uF	25V
		*****		C137	1-164-232-11	CERAMIC CHIP 0.01uF	50V
		< CAPACITOR >		C139	1-163-235-11	CERAMIC CHIP 22PF	5%
C101	1-126-607-11	ELECT CHIP 47uF 20%	4V	C140	1-163-235-11	CERAMIC CHIP 22PF	5%
C102	1-163-275-11	CERAMIC CHIP 0.001uF	5%	C141	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C103	1-164-346-11	CERAMIC CHIP 1uF	16V	C142	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C105	1-163-038-91	CERAMIC CHIP 0.1uF	25V	C145	1-135-201-11	TANTALUM CHIP 10uF	20%
C106	1-164-695-11	CERAMIC CHIP 0.0022uF	5%	C146	1-135-201-11	TANTALUM CHIP 10uF	20%
C107	1-164-695-11	CERAMIC CHIP 0.0022uF	5%	C147	1-163-275-11	CERAMIC CHIP 0.001uF	5%
C108	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C148	1-163-275-11	CERAMIC CHIP 0.001uF	5%
C109	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C149	1-164-346-11	CERAMIC CHIP 1uF	16V
C110	1-163-989-11	CERAMIC CHIP 0.033uF	10%	C153	1-135-259-11	TANTAL. CHIP 10uF	20%
C111	1-163-038-91	CERAMIC CHIP 0.1uF	25V	C154	1-163-235-11	CERAMIC CHIP 22PF	5%
C112	1-163-038-91	CERAMIC CHIP 0.1uF	25V			< CONNECTOR >	
C113	1-164-695-11	CERAMIC CHIP 0.0022uF	5%	CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P	
C114	1-164-005-11	CERAMIC CHIP 0.47uF	25V	CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P	
C115	1-126-607-11	ELECT CHIP 47uF	20%			< IC >	
C116	1-163-143-00	CERAMIC CHIP 0.0012uF	5%	IC101	8-752-069-56	IC CXA1782BQ	
C117	1-164-005-11	CERAMIC CHIP 0.47uF	25V	IC102	8-759-291-06	IC BA6397FP-T1	
C118	1-163-038-91	CERAMIC CHIP 0.1uF	25V	IC103	8-752-372-94	IC CXD2507AQ	
C119	1-163-038-91	CERAMIC CHIP 0.1uF	25V	IC104	8-759-185-29	IC PCM1710U-BT1	
C120	1-135-201-11	TANTALUM CHIP 10uF	20%			< MOTOR >	
C121	1-163-038-91	CERAMIC CHIP 0.1uF	25V	M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
C122	1-164-232-11	CERAMIC CHIP 0.01uF	50V	M102	X-4917-504-1	MOTOR ASSY (SLED)	
C123	1-163-038-91	CERAMIC CHIP 0.1uF	25V			< TRANSISTOR >	
C124	1-126-607-11	ELECT CHIP 47uF	20%	Q101	8-729-010-08	TRANSISTOR MSB710	
C125	1-164-232-11	CERAMIC CHIP 0.01uF	50V	Q102	8-729-424-08	TRANSISTOR UN2111	
C126	1-163-038-91	CERAMIC CHIP 0.1uF	25V	Q103	8-729-421-22	TRANSISTOR UN2211	
C127	1-164-695-11	CERAMIC CHIP 0.0022uF	5%			< RESISTOR >	
C128	1-163-135-00	CERAMIC CHIP 560PF	5%	R102	1-216-001-00	METAL CHIP 10 5%	1/10W
C129	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R103	1-216-049-00	METAL CHIP 1K 5%	1/10W
C130	1-164-336-11	CERAMIC CHIP 0.33uF	25V	R104	1-216-097-00	METAL CHIP 100K 5%	1/10W
C131	1-163-038-91	CERAMIC CHIP 0.1uF	25V				
C132	1-163-037-11	CERAMIC CHIP 0.022uF	10%				
C133	1-163-145-00	CERAMIC CHIP 0.0015uF	5%				
C134	1-164-346-11	CERAMIC CHIP 1uF	16V				
C135	1-163-117-00	CERAMIC CHIP 100PF	5%				

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R105	1-216-089-00	METAL CHIP	47K	5%	1/10W	R158	1-216-001-00	METAL CHIP	10	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W	< VARIABLE RESISTOR >					
R107	1-216-089-00	METAL CHIP	47K	5%	1/10W	RV101	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
R108	1-216-089-00	METAL CHIP	47K	5%	1/10W	RV102	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W	RV103	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
R112	1-216-077-00	METAL CHIP	15K	5%	1/10W	< SWITCH >					
R113	1-216-077-00	METAL CHIP	15K	5%	1/10W	S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W	< VIBRATOR >					
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W	X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)			
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	*****					
R117	1-216-093-00	METAL CHIP	68K	5%	1/10W	*	A-4371-911-A	CD MAIN BOARD, COMPLETE			
R118	1-216-049-00	METAL CHIP	1K	5%	1/10W	*****					
R119	1-216-121-00	METAL CHIP	1M	5%	1/10W	< CAPACITOR >					
R120	1-216-089-00	METAL CHIP	47K	5%	1/10W	C301	1-124-480-11	ELECT	470uF	20%	25V
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W	C302	1-124-907-11	ELECT	10uF	20%	50V
R122	1-216-097-00	METAL CHIP	100K	5%	1/10W	C303	1-124-907-11	ELECT	10uF	20%	50V
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W	C304	1-164-159-11	CERAMIC	0.1uF		50V
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W	C305	1-164-159-11	CERAMIC	0.1uF		50V
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	C306	1-164-159-11	CERAMIC	0.1uF		50V
R126	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	C307	1-124-472-11	ELECT	470uF	20%	10V
R127	1-216-089-00	METAL CHIP	47K	5%	1/10W	C308	1-124-477-11	ELECT	47uF	20%	25V
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W	C309	1-126-927-11	ELECT	2200uF	20%	10V
R129	1-216-049-00	METAL CHIP	1K	5%	1/10W	C310	1-124-477-11	ELECT	47uF	20%	25V
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W	C311	1-164-159-11	CERAMIC	0.1uF		50V
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W	C312	1-130-479-00	MYLAR	0.0047uF	5%	50V
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	C313	1-130-479-00	MYLAR	0.0047uF	5%	50V
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	< CONNECTOR >					
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	* CN301	1-568-862-11	SOCKET, CONNECTOR 19P			
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	CN302	1-770-064-11	CONNECTOR, FFC/FPC 29P			
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W	* CN303	1-568-943-11	PIN, CONNECTOR 5P			
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	* CN304	1-568-824-11	SOCKET, CONNECTOR 5P			
R138	1-216-049-00	METAL CHIP	1K	5%	1/10W	< DIODE >					
R139	1-216-033-00	METAL CHIP	220	5%	1/10W	D301	8-719-010-42	DIODE	UZ-5.6BSB		
R140	1-216-081-00	METAL CHIP	22K	5%	1/10W	D302	8-719-200-82	DIODE	11ES2		
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	D303	8-719-200-82	DIODE	11ES2		
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	< IC >					
R143	1-216-121-00	METAL CHIP	1M	5%	1/10W	IC301	8-759-172-31	IC	BA6191		
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W	< COIL >					
R145	1-216-097-00	METAL CHIP	100K	5%	1/10W	L301	1-410-322-11	INDUCTOR	3.3uH		
R146	1-216-097-00	METAL CHIP	100K	5%	1/10W	L302	1-410-322-11	INDUCTOR	3.3uH		
R147	1-216-049-00	METAL CHIP	1K	5%	1/10W						
R148	1-216-049-00	METAL CHIP	1K	5%	1/10W						
R149	1-216-049-00	METAL CHIP	1K	5%	1/10W						
R150	1-216-037-00	METAL CHIP	330	5%	1/10W						
R151	1-216-037-00	METAL CHIP	330	5%	1/10W						
R152	1-216-037-00	METAL CHIP	330	5%	1/10W						
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W						
R154	1-216-065-00	METAL CHIP	4.7K	5%	1/10W						
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W						
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W						

## CD MAIN

## CD PANEL

## DBFB

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R301	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R302	1-249-424-11	CARBON 3. 9K 5% 1/4W F	
R303	1-249-415-11	CARBON 680 5% 1/4W F	
R304	1-247-834-11	CARBON 1. 3K 5% 1/4W	
R305	1-249-421-11	CARBON 2. 2K 5% 1/4W F	
R306	1-249-421-11	CARBON 2. 2K 5% 1/4W F	
R307	1-249-415-11	CARBON 680 5% 1/4W F	
R308	1-249-415-11	CARBON 680 5% 1/4W F	
*****			
*	1-654-630-11	CD PANEL BOARD	
*****			
< DIODE >			
D604	8-719-046-35	DIODE SEL5921A-TH8F (CD)	
D611	8-719-023-94	LED SEL3910A-CD (■)	
D612	8-719-046-42	DIODE SEL5421E-TH8F (▷)	
D617	8-719-046-42	DIODE SEL5421E-TH8F	(N250:E, MX, AR, AUS, PX)
D618	8-719-046-42	DIODE SEL5421E-TH8F	(N250:E, MX, AR, AUS, PX)
D619	8-719-046-42	DIODE SEL5421E-TH8F	(N250:E, MX, AR, AUS, PX)
D620	8-719-046-42	DIODE SEL5421E-TH8F	(N250:E, MX, AR, AUS, PX)
D621	8-719-046-42	DIODE SEL5421E-TH8F	(N250:E, MX, AR, AUS, PX)
< RESISTOR >			
R617	1-249-413-11	CARBON 470 5% 1/4W F	
R618	1-249-414-11	CARBON 560 5% 1/4W F	
R619	1-249-416-11	CARBON 820 5% 1/4W F	
R639	1-249-410-11	CARBON 270 5% 1/4W F	
R640	1-249-408-11	CARBON 180 5% 1/4W F	
R641	1-249-409-11	CARBON 220 5% 1/4W F	
R642	1-249-411-11	CARBON 330 5% 1/4W	
R643	1-249-413-11	CARBON 470 5% 1/4W F	
R644	1-249-414-11	CARBON 560 5% 1/4W F	
R645	1-249-416-11	CARBON 820 5% 1/4W F	
R684	1-249-416-11	CARBON 820 5% 1/4W F	(N250:E, MX, AR, AUS, PX)
< SWITCH >			
S608	1-554-303-21	SWITCH, TACTILE (■)	
S609	1-554-303-21	SWITCH, TACTILE (■)	
S610	1-554-303-21	SWITCH, TACTILE (▶▶)	
S611	1-554-303-21	SWITCH, TACTILE (◀◀)	
S630	1-554-303-21	SWITCH, TACTILE (CD)	
S631	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)	

Ref. No.	Part No.	Description	Remark
S632	1-554-303-21	SWITCH, TACTILE (DISC SKIP)	
S633	1-554-303-21	SWITCH, TACTILE (DISC 5)	
S634	1-554-303-21	SWITCH, TACTILE (DISC 4)	
S635	1-554-303-21	SWITCH, TACTILE (DISC 3)	
S636	1-554-303-21	SWITCH, TACTILE (DISC 2)	
S637	1-554-303-21	SWITCH, TACTILE (DISC 1)	
*****			
* A-4377-985-A DBFB BOARD, COMPLETE			
(N250:E, MX, AR, AUS, PX)			
*****			
< CAPACITOR >			
C2101	1-124-925-11	ELECT 2. 2uF 20% 100V	
C2102	1-136-165-00	FILM 0. 1uF 5% 50V	
C2103	1-136-165-00	FILM 0. 1uF 5% 50V	
C2131	1-126-101-11	ELECT 100uF 20% 16V	
C2132	1-126-101-11	ELECT 100uF 20% 16V	
C2133	1-124-902-00	ELECT 0. 47uF 20% 50V	
C2151	1-124-925-11	ELECT 2. 2uF 20% 100V	
C2152	1-136-165-00	FILM 0. 1uF 5% 50V	
C2153	1-136-165-00	FILM 0. 1uF 5% 50V	
< CONNECTOR >			
CN2101	1-564-506-11	PLUG, CONNECTOR 3P	
CN2102	1-564-511-11	PLUG, CONNECTOR 8P	
< DIODE >			
D2101	8-719-987-63	DIODE 1N4148M	
D2102	8-719-933-47	DIODE H2S7B2L	
D2103	8-719-933-47	DIODE H2S7B2L	
< IC >			
IC2101	8-759-634-51	IC M5218AP	
< TRANSISTOR >			
Q2101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2151	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2152	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< RESISTOR >			
R2101	1-249-437-11	CARBON 47K 5% 1/4W	
R2102	1-247-807-31	CARBON 100 5% 1/4W	
R2103	1-249-429-11	CARBON 10K 5% 1/4W	
R2104	1-247-863-91	CARBON 22K 5% 1/4W	
R2105	1-247-903-00	CARBON 1. 0M 5% 1/4W	
R2106	1-249-419-11	CARBON 1. 5K 5% 1/4W	
R2107	1-247-895-00	CARBON 470K 5% 1/4W	
R2108	1-249-437-11	CARBON 47K 5% 1/4W	

## DBFB

## H. P

## LEAF SW (A)

## LEAF SW (B)

## LOADING MOTOR

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R2131	1-249-423-11	CARBON	3.3K 5% 1/4W	*	1-640-703-11	LEAF SW (B) BOARD	
R2132	1-249-423-11	CARBON	3.3K 5% 1/4W			*****	
R2133	1-249-429-11	CARBON	10K 5% 1/4W		1-571-736-11	SWITCH, LEAF	
R2134	1-249-429-11	CARBON	10K 5% 1/4W			< CAPACITOR >	
R2135	1-249-411-11	CARBON	330 5% 1/4W				
R2136	1-249-441-11	CARBON	100K 5% 1/4W		C545	1-164-159-11 CERAMIC	0.1uF 50V
R2137	1-247-903-00	CARBON	1.0M 5% 1/4W			< CONNECTOR >	
R2151	1-249-437-11	CARBON	47K 5% 1/4W				
R2152	1-247-807-31	CARBON	100 5% 1/4W				
R2153	1-249-429-11	CARBON	10K 5% 1/4W	* CN416	1-568-943-11	PIN, CONNECTOR 5P	
R2154	1-247-863-91	CARBON	22K 5% 1/4W			< SWITCH >	
R2155	1-247-903-00	CARBON	1.0M 5% 1/4W				
R2156	1-249-419-11	CARBON	1.5K 5% 1/4W	S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
R2157	1-247-895-00	CARBON	470K 5% 1/4W	S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
R2158	1-249-437-11	CARBON	47K 5% 1/4W	S3	1-571-736-11	SWITCH, LEAF (REC B)	
*****				*****			
*	1-654-627-11	H. P BOARD			1-638-730-11	LOADING MOTOR BOARD	
		*****				*****	
		< CAPACITOR >				< CONNECTOR >	
C1201	1-162-282-31	CERAMIC	100PF 10% 50V (N250:AEP, IT, G)	* CN705	1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P	
C1202	1-162-282-31	CERAMIC	100PF 10% 50V (N250:AEP, IT, G)			< MOTOR >	
C1203	1-164-159-11	CERAMIC	0.1uF 50V	M702	A-4353-974-A	MOTOR ASSY (LOADING)	
C1204	1-164-159-11	CERAMIC	0.1uF 50V	*****			
		< CONNECTOR >					
* CN1205	1-568-954-11	PIN, CONNECTOR 5P					
		< JACK >					
J1201	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)					
*****							
*	1-640-702-11	LEAF SW (A) BOARD					
		*****					
		< CAPACITOR >					
C544	1-164-159-11	CERAMIC	0.1uF 50V				
		< CONNECTOR >					
* CN415	1-568-942-11	PIN, CONNECTOR 4P					
		< SWITCH >					
S4	1-571-736-11	SWITCH, LEAF (MOTOR A)					
S5	1-571-736-11	SWITCH, LEAF (PLAY A)					
*****							

# MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4371-914-A	MAIN BOARD, COMPLETE (N250:CND) *****		C22	1-124-907-11	ELECT 10uF 20% 50V	
*	A-4371-940-A	MAIN BOARD, COMPLETE (N250:AEP2) *****		C23	1-124-907-11	ELECT 10uF 20% 50V	
*	A-4371-948-A	MAIN BOARD, COMPLETE (N250:AR) *****		C24	1-137-436-11	FILM 0.0039uF 5% 50V (D260/N250:CND, AEP, IT, G)	
*	A-4377-204-A	MAIN BOARD, COMPLETE (N250:E, MX) *****		C25	1-137-436-11	FILM 0.0039uF 5% 50V (D260/N250:CND, AEP, IT, G)	
*	A-4377-253-A	MAIN BOARD, COMPLETE (N250:AEP1) *****		C26	1-136-158-00	FILM 0.027uF 5% 50V (N250:AEP, E, IT, G, MX, AR, AUS, PX)	
*	A-4377-459-A	MAIN BOARD, COMPLETE (N250:PX) *****		C26	1-136-160-00	FILM 0.039uF 5% 50V (D260/N250:CND)	
*	A-4377-592-A	MAIN BOARD, COMPLETE (N250:G) *****		C27	1-136-158-00	FILM 0.027uF 5% 50V (N250:AEP, E, IT, G, MX, AR, AUS, PX)	
*	A-4377-594-A	MAIN BOARD, COMPLETE (N250:IT) *****		C27	1-136-160-00	FILM 0.039uF 5% 50V (D260/N250:CND)	
*	A-4377-803-A	MAIN BOARD, COMPLETE (D260) *****		C28	1-124-903-11	ELECT 1uF 20% 50V	
*	A-4378-100-A	MAIN BOARD, COMPLETE (N250:AUS) *****		C29	1-162-294-31	CERAMIC 0.001uF 10% 50V	
	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P BOARD (N250:AUS)		C30	1-162-600-11	CERAMIC 0.0047uF 30% 16V	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		C31	1-124-477-11	ELECT 47uF 20% 25V	
	< CAPACITOR >			C32	1-126-962-11	ELECT 3.3uF 20% 50V	
C1	1-162-306-11	CERAMIC 0.01uF 30% 16V		C33	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C2	1-126-934-11	ELECT 220uF 20% 16V		C34	1-124-907-11	ELECT 10uF 20% 50V	
C3	1-162-306-11	CERAMIC 0.01uF 30% 16V		C35	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C4	1-162-306-11	CERAMIC 0.01uF 30% 16V		C38	1-162-211-31	CERAMIC 33PF 5% 50V (N250:AEP, IT, G)	
C5	1-162-306-11	CERAMIC 0.01uF 30% 16V		C40	1-101-005-00	CERAMIC 22000PF 50V	
C6	1-162-306-11	CERAMIC 0.01uF 30% 16V		C41	1-164-159-11	CERAMIC 0.1uF 50V (N250:AEP)	
C7	1-162-306-11	CERAMIC 0.01uF 30% 16V		C42	1-162-196-31	CERAMIC 5.6PF 10% 50V (N250:AEP)	
C8	1-162-306-11	CERAMIC 0.01uF 30% 16V		C42	1-162-198-31	CERAMIC 8.2PF 10% 50V (D260/N250:CND, E, IT, G, MX, AR, AUS, PX)	
C9	1-124-907-11	ELECT 10uF 20% 50V (D260/N250:CND, AEP, E, MX, AR, AUS, PX)		C43	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C11	1-162-306-11	CERAMIC 0.01uF 30% 16V		C44	1-102-120-00	CERAMIC 0.0018uF 10% 50V (N250:AEP)	
C12	1-126-934-11	ELECT 220uF 20% 16V		C45	1-162-301-11	CERAMIC 0.0015uF 30% 16V (N250:AEP)	
C13	1-162-306-11	CERAMIC 0.01uF 30% 16V		C46	1-101-005-00	CERAMIC 22000PF 50V (N250:AEP)	
C14	1-162-306-11	CERAMIC 0.01uF 30% 16V		C51	1-164-031-11	CERAMIC 33PF 5% 50V	
C15	1-164-159-11	CERAMIC 0.1uF 50V		C52	1-164-027-11	CERAMIC 22PF 5% 50V	
C16	1-124-907-11	ELECT 10uF 20% 50V		C53	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C17	1-124-902-00	ELECT 0.47uF 20% 50V		C54	1-124-477-11	ELECT 47uF 20% 25V	
C18	1-124-903-11	ELECT 1uF 20% 50V		C55	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C19	1-124-903-11	ELECT 1uF 20% 50V		C56	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C20	1-124-907-11	ELECT 10uF 20% 50V		C57	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C21	1-124-907-11	ELECT 10uF 20% 50V		C58	1-162-306-11	CERAMIC 0.01uF 30% 16V	
				C61	1-124-925-11	ELECT 2.2uF 20% 100V	
				C62	1-164-159-11	CERAMIC 0.1uF 50V	
				C63	1-162-306-11	CERAMIC 0.01uF 30% 16V	
				C67	1-162-294-31	CERAMIC 0.001uF 10% 50V (N250:AEP)	
				C68	1-162-306-11	CERAMIC 0.01uF 30% 16V	
				C69	1-124-120-11	ELECT 220uF 20% 25V	

Ref.No.	Part No.	Description	Remark			Ref.No.	Part No.	Description	Remark		
C71	1-136-173-00	FILM	0.47uF	5%	50V (N250:AEP)	C826	1-124-903-11	ELECT	1uF	20%	50V
C72	1-161-494-00	CERAMIC	0.022uF		25V (N250:AEP)	C827	1-124-902-00	ELECT	0.47uF	20%	50V
C73	1-161-494-00	CERAMIC	0.022uF		25V (N250:AEP)	C828	1-124-927-11	ELECT	4.7uF	20%	100V
C530	1-161-494-00	CERAMIC	0.022uF		25V (N250:AEP, IT, G)	C829	1-162-291-31	CERAMIC	560PF	10%	50V
C531	1-161-494-00	CERAMIC	0.022uF		25V (N250:AEP, IT, G)	C830	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C532	1-161-494-00	CERAMIC	0.022uF		25V (N250:AEP, IT, G)	C831	1-164-056-11	CERAMIC	27PF	5%	50V
C700	1-162-282-31	CERAMIC	100PF	10%	50V	C832	1-101-890-00	CERAMIC	75PF	5%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V	C833	1-162-288-31	CERAMIC	330PF	10%	50V
C702	1-137-372-11	FILM	0.022uF	5%	50V	C834	1-164-066-11	CERAMIC	68PF	5%	50V
C703	1-124-907-11	ELECT	10uF	20%	50V	C903	1-126-176-11	ELECT	220uF	20%	10V
C704	1-162-292-31	CERAMIC	680PF	10%	50V	C904	1-126-176-11	ELECT	220uF	20%	10V
C710	1-162-282-31	CERAMIC	100PF	10%	50V	C905	1-124-443-00	ELECT	100uF	20%	10V
C711	1-162-289-31	CERAMIC	390PF	10%	50V	C906	1-124-443-00	ELECT	100uF	20%	10V
C712	1-137-372-11	FILM	0.022uF	5%	50V	C907	1-124-443-00	ELECT	100uF	20%	10V
C713	1-124-907-11	ELECT	10uF	20%	50V	C908	1-124-443-00	ELECT	100uF	20%	10V
C715	1-126-176-11	ELECT	220uF	20%	10V	C909	1-124-907-11	ELECT	10uF	20%	50V
C721	1-137-368-11	FILM	0.0047uF	5%	50V	C910	1-124-907-11	ELECT	10uF	20%	50V
C722	1-124-903-11	ELECT	1uF	20%	50V	C915	1-126-933-11	ELECT	100uF	20%	16V
C723	1-124-927-11	ELECT	4.7uF	20%	100V	C920	1-162-306-11	CERAMIC	0.01uF	30%	16V
C724	1-137-399-11	FILM	0.1uF	5%	50V (D260/N250:CND, AEP, IT, G)	C921	1-124-925-11	ELECT	2.2uF	20%	100V
C726	1-124-903-11	ELECT	1uF	20%	50V	C922	1-130-848-00	FILM	0.0082uF	5%	100V
C727	1-124-902-00	ELECT	0.47uF	20%	50V	C923	1-124-925-11	ELECT	2.2uF	20%	100V
C728	1-124-927-11	ELECT	4.7uF	20%	100V	C924	1-137-438-11	FILM	0.0082uF	5%	50V
C729	1-162-291-31	CERAMIC	560PF	10%	50V	C925	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C730	1-162-301-11	CERAMIC	0.0015uF	30%	16V	C926	1-137-436-11	FILM	0.0039uF	5%	50V
C731	1-164-056-11	CERAMIC	27PF	5%	50V	C927	1-137-436-11	FILM	0.0039uF	5%	50V
C732	1-101-890-00	CERAMIC	75PF	5%	50V	C928	1-137-372-11	FILM	0.022uF	5%	50V
C733	1-162-288-31	CERAMIC	330PF	10%	50V	C929	1-124-120-11	ELECT	220uF	20%	25V
C734	1-164-066-11	CERAMIC	68PF	5%	50V	C931	1-124-120-11	ELECT	220uF	20%	25V
C800	1-162-282-31	CERAMIC	100PF	10%	50V	C932	1-164-159-11	CERAMIC	0.1uF		50V
C801	1-162-290-31	CERAMIC	470PF	10%	50V	C933	1-164-159-11	CERAMIC	0.1uF		50V
C802	1-137-372-11	FILM	0.022uF	5%	50V	C934	1-164-159-11	CERAMIC	0.1uF		50V
C803	1-124-907-11	ELECT	10uF	20%	50V	C938	1-162-282-31	CERAMIC	100PF	10%	50V
C804	1-162-292-31	CERAMIC	680PF	10%	50V	C941	1-124-927-11	ELECT	4.7uF	20%	100V
C810	1-162-282-31	CERAMIC	100PF	10%	50V	C942	1-164-159-11	CERAMIC	0.1uF		50V
C811	1-162-289-31	CERAMIC	390PF	10%	50V	C943	1-124-903-11	ELECT	1uF	20%	50V (D260/N250:CND, AEP, IT, G)
C812	1-137-372-11	FILM	0.022uF	5%	50V	C1001	1-162-286-21	CERAMIC	220PF	10%	50V (N250:AEP, IT, G)
C813	1-124-907-11	ELECT	10uF	20%	50V	C1003	1-162-282-31	CERAMIC	100PF	10%	50V (EXCEPT N250:AUS)
C815	1-126-176-11	ELECT	220uF	20%	10V	C1003	1-162-286-21	CERAMIC	220PF	10%	50V (N250:AUS)
C821	1-137-368-11	FILM	0.0047uF	5%	50V	C1004	1-162-282-31	CERAMIC	100PF	10%	50V (EXCEPT N250:AUS)
C822	1-124-903-11	ELECT	1uF	20%	50V	C1005	1-124-927-11	ELECT	4.7uF	20%	100V (EXCEPT N250:AUS)
C823	1-124-927-11	ELECT	4.7uF	20%	100V	C1006	1-162-600-11	CERAMIC	0.0047uF	20%	16V (EXCEPT N250:AUS)
C824	1-137-399-11	FILM	0.1uF	5%	50V (D260/N250:CND, AEP, IT, G)	C1007	1-162-301-11	CERAMIC	0.0015uF	20%	16V (EXCEPT N250:AUS)

# MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C1008	1-124-464-11	ELECT	0. 22uF 20% 50V (EXCEPT N250:AUS)	C1182	1-124-907-11	ELECT	10uF 20% 50V
C1009	1-124-477-11	ELECT	47uF 20% 25V (N250:AEP, IT, G)	C1191	1-124-907-11	ELECT	10uF 20% 50V
C1010	1-164-159-11	CERAMIC	0. 1uF 50V	C1192	1-124-907-11	ELECT	10uF 20% 50V
C1045	1-124-925-11	ELECT	2. 2uF 20% 100V	C1193	1-124-907-11	ELECT	10uF 20% 50V
C1051	1-162-286-21	CERAMIC	220PF 10% 50V (N250:AEP, IT, G)	C1199	1-164-159-11	CERAMIC	0. 1uF 50V
C1053	1-162-282-31	CERAMIC	100PF 10% 50V (EXCEPT N250:AUS)	C1221	1-124-443-00	ELECT	100uF 20% 10V
C1053	1-162-286-21	CERAMIC	220PF 10% 50V (N250:AUS)	C1222	1-126-176-11	ELECT	220uF 20% 10V
C1054	1-162-282-31	CERAMIC	100PF 10% 50V (EXCEPT N250:AUS)	C1223	1-126-176-11	ELECT	220uF 20% 10V
C1055	1-124-927-11	ELECT	4. 7uF 20% 100V (EXCEPT N250:AUS)	C1224	1-124-925-11	ELECT	2. 2uF 20% 100V
C1056	1-162-600-11	CERAMIC	0. 0047uF 20% 16V (EXCEPT N250:AUS)	C1247	1-161-494-00	CERAMIC	0. 022uF 25V (N250:AEP, IT, G)
C1057	1-162-301-11	CERAMIC	0. 0015uF 20% 16V (EXCEPT N250:AUS)	C1248	1-137-375-11	FILM	0. 068uF 5% 50V (D260/N250:CND, AEP, IT, G)
C1058	1-124-464-11	ELECT	0. 22uF 20% 50V (EXCEPT N250:AUS)	C1249	1-137-375-11	FILM	0. 068uF 5% 50V (D260/N250:CND, AEP, IT, G)
C1059	1-124-477-11	ELECT	47uF 20% 25V (N250:AEP, IT, G)	C1297	1-161-494-00	CERAMIC	0. 022uF 25V (N250:AEP, IT, G)
C1060	1-164-159-11	CERAMIC	0. 1uF 50V	C1298	1-137-375-11	FILM	0. 068uF 5% 50V (D260/N250:CND, AEP, IT, G)
C1083	1-162-306-11	CERAMIC	0. 01uF 30% 16V	C1299	1-137-375-11	FILM	0. 068uF 5% 50V (D260/N250:CND, AEP, IT, G)
C1084	1-162-306-11	CERAMIC	0. 01uF 30% 16V	C1301	1-136-165-00	FILM	0. 1uF 5% 50V
C1101	1-137-440-11	FILM	0. 018uF 5% 50V	C1302	1-136-165-00	FILM	0. 1uF 5% 50V
C1102	1-124-903-11	ELECT	1uF 20% 50V	C1303	1-126-974-11	ELECT	3300uF 20% 50V (D260/N250:E, MX, AR, AUS, PX)
C1103	1-162-302-11	CERAMIC	0. 0022uF 20% 16V	C1303	1-128-549-11	ELECT	3300uF 20% 35V (N250:CND, AEP, IT, G)
C1104	1-137-443-11	FILM	0. 056uF 5% 50V	C1304	1-126-974-11	ELECT	3300uF 20% 50V (D260/N250:E, MX, AR, AUS, PX)
C1105	1-162-600-11	CERAMIC	0. 0047uF 20% 16V	C1304	1-128-549-11	ELECT	3300uF 20% 35V (N250:CND, AEP, IT, G)
C1106	1-136-171-00	FILM	0. 33uF 5% 50V	C1305	1-126-105-11	ELECT	1000uF 20% 35V
C1107	1-136-167-00	FILM	0. 15uF 5% 50V	C1306	1-126-101-11	ELECT	100uF 20% 16V
C1111	1-137-372-11	FILM	0. 022uF 5% 50V	C1307	1-124-477-11	ELECT	47uF 20% 25V
C1131	1-124-902-00	ELECT	0. 47uF 20% 50V (N250:E, MX, AR, AUS, PX)	C1321	1-124-122-11	ELECT	100uF 20% 50V
C1131	1-124-907-11	ELECT	10uF 20% 50V (D260/N250:CND, AEP, IT, G)	C1322	1-124-122-11	ELECT	100uF 20% 50V
C1132	1-124-907-11	ELECT	10uF 20% 50V	C1331	1-136-165-00	FILM	0. 1uF 5% 50V
C1133	1-124-927-11	ELECT	4. 7uF 20% 100V	C1332	1-136-165-00	FILM	0. 1uF 5% 50V
C1151	1-137-440-11	FILM	0. 018uF 5% 50V	C1333	1-124-910-11	ELECT	47uF 20% 50V
C1152	1-124-903-11	ELECT	1uF 20% 50V	C1334	1-124-122-11	ELECT	100uF 20% 50V
C1153	1-162-302-11	CERAMIC	0. 0022uF 20% 16V	C1335	1-124-771-00	ELECT	6800uF 20% 25V
C1154	1-137-443-11	FILM	0. 056uF 5% 50V	C1336	1-124-636-00	ELECT	3300uF 20% 25V
C1155	1-162-600-11	CERAMIC	0. 0047uF 20% 16V	C1341	1-124-907-11	ELECT	10uF 20% 50V
C1156	1-136-171-00	FILM	0. 33uF 5% 50V	C1342	1-124-463-00	ELECT	0. 1uF 20% 50V
C1157	1-136-167-00	FILM	0. 15uF 5% 50V	C1343	1-162-306-11	CERAMIC	0. 01uF 30% 16V
C1161	1-137-443-11	FILM	0. 056uF 5% 50V	C1344	1-162-306-11	CERAMIC	0. 01uF 30% 16V
C1181	1-124-902-00	ELECT	0. 47uF 20% 50V (N250:E, MX, AR, AUS, PX)	C1345	1-124-907-11	ELECT	10uF 20% 50V
C1181	1-124-907-11	ELECT	10uF 20% 50V (D260/N250:CND, AEP, IT, G)	C1346	1-124-907-11	ELECT	10uF 20% 50V
				C1361	1-124-473-11	ELECT	1000uF 20% 10V
				C1362	1-124-473-11	ELECT	1000uF 20% 10V
				C1364	1-126-927-11	ELECT	2200uF 20% 6. 3V
				C1365	1-124-472-11	ELECT	470uF 20% 10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C1371	1-124-477-11	ELECT	47uF 20% 25V (N250:AEP2, E, MX)	CN1751	1-770-064-11	CONNECTOR, FFC/FPC 29P	
C1382	1-124-443-00	ELECT	100uF 20% 10V	< DIODE >			
C1383	1-126-101-11	ELECT	100uF 20% 16V	D1	8-719-987-63	DIODE 1N4148M	
C1391	1-124-472-11	ELECT	470uF 20% 10V	D901	8-719-200-82	DIODE 11ES2	
C1502	1-164-159-11	CERAMIC	0.1uF 50V	D902	8-719-987-63	DIODE 1N4148M	
C1503	1-164-159-11	CERAMIC	0.1uF 50V	D903	8-719-987-63	DIODE 1N4148M	
C1567	1-164-159-11	CERAMIC	0.1uF 50V	D904	8-719-987-63	DIODE 1N4148M	
C1568	1-162-282-31	CERAMIC	100PF 10% 50V	D905	8-719-987-63	DIODE 1N4148M	
C1801	1-124-907-11	ELECT	10uF 20% 50V	D906	8-719-987-63	DIODE 1N4148M	
C1802	1-162-306-11	CERAMIC	0.01uF 30% 16V	D1101	8-719-987-63	DIODE 1N4148M	
C1851	1-124-443-00	ELECT	100uF 20% 10V	D1204	8-719-987-63	DIODE 1N4148M	
C1852	1-164-159-11	CERAMIC	0.1uF 50V	D1205	8-719-987-63	DIODE 1N4148M	
C1853	1-102-948-00	CERAMIC	11PF 5% 50V	D1206	8-719-987-63	DIODE 1N4148M	
C1854	1-102-948-00	CERAMIC	11PF 5% 50V	D1301	8-719-312-09	DIODE RBA-402 (N250)	
C1855	1-124-443-00	ELECT	100uF 20% 10V	D1301	8-719-510-68	DIODE D5SBA20F01 (D260)	
C1861	1-162-306-11	CERAMIC	0.01uF 30% 16V	D1309	8-719-987-63	DIODE 1N4148M	
C1862	1-162-306-11	CERAMIC	0.01uF 30% 16V	D1310	8-719-987-63	DIODE 1N4148M	
C1863	1-164-159-11	CERAMIC	0.1uF 50V	D1311	8-719-200-82	DIODE 11ES2	
C1865	1-124-442-00	ELECT	330uF 20% 6.3V	D1312	8-719-001-43	DIODE UZL-11M1	
C1866	1-124-442-00	ELECT	330uF 20% 6.3V	D1321	8-719-200-82	DIODE 11ES2	
C1867	1-162-294-31	CERAMIC	0.001uF 10% 50V	D1322	8-719-200-82	DIODE 11ES2	
C1868	1-164-159-11	CERAMIC	0.1uF 50V	D1323	8-719-011-05	DIODE UZ-27BS	
C1869	1-162-294-31	CERAMIC	0.001uF 10% 50V	D1331	8-719-200-82	DIODE 11ES2	
C1870	1-162-306-11	CERAMIC	0.01uF 30% 16V	D1332	8-719-200-82	DIODE 11ES2	
C1872	1-162-306-11	CERAMIC	0.01uF 30% 16V	D1333	8-719-200-82	DIODE 11ES2	
< FILTER >				D1334	8-719-200-82	DIODE 11ES2	
CF1	1-567-389-11	FILTER, CERAMIC (10.7MHz)		D1341	8-719-987-63	DIODE 1N4148M	
CF2	1-760-393-11	FILTER, CERAMIC (10.7MHz) (N250:AEP, IT, G)		D1361	8-719-200-82	DIODE 11ES2	
CF3	1-567-389-11	FILTER, CERAMIC (10.7MHz) (D260/N250:CND, E, MX, AR, AUS, PX)		D1362	8-719-200-82	DIODE 11ES2	
CF3	1-760-393-11	FILTER, CERAMIC (10.7MHz) (N250:AEP, IT, G)		D1364	8-719-200-82	DIODE 11ES2	
CF4	1-760-220-11	FILTER, CERAMIC (10.7MHz)		D1365	8-719-200-82	DIODE 11ES2	
CF5	1-527-981-00	FILTER, CERAMIC (450kHz)		D1366	8-719-200-82	DIODE 11ES2	
CF6	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)		D1367	8-719-200-82	DIODE 11ES2	
< CONNECTOR >				D1381	8-719-987-63	DIODE 1N4148M	
CN903	1-564-506-11	PLUG, CONNECTOR 3P		D1382	8-719-987-63	DIODE 1N4148M	
* CN904	1-564-509-11	PLUG, CONNECTOR 6P		D1391	8-719-987-63	DIODE 1N4148M	
CN905	1-564-505-11	PLUG, CONNECTOR 2P		D1701	8-719-024-98	DIODE 11EQS04	
* CN906	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		D1702	8-719-987-63	DIODE 1N4148M	
* CN911	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P		D1851	8-719-200-82	DIODE 11ES2	
* CN912	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P		D1852	8-719-987-63	DIODE 1N4148M	
* CN913	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P		D1853	8-719-987-63	DIODE 1N4148M	
* CN1001	1-565-042-11	HOUSING, CONNECTOR (PC BOARD) 5P (EXCEPT N250:AUS)		D1931	8-719-987-63	DIODE 1N4148M (N250:E, MX, AR, AUS, PX)	
CN1301	1-764-332-11	PIN, CONNECTOR (PCB) (V TYPE) 9P		< FRONTEND >			
* CN1371	1-566-210-11	PIN, CONNECTOR 3P (N250:AEP2, E, MX)		FE1	1-693-090-51	FRONT END (FM) (2 GANG) (D260/N250:CND, E, MX, AR, AUS, PX)	
* CN1501	1-568-834-11	SOCKET, CONNECTOR 15P		FE1	1-693-276-11	FRONT END (4 GANG) (N250:AEP, IT, G)	
CN1501	1-750-420-11	CONNECTOR, FFC/FPC 15P					



# MAIN

Ref.No.	Part No.	Description	Remark
< IC >			
IC1	8-759-200-60	IC TA7060AP (N250:AEP, IT, G)	
IC2	8-759-200-60	IC TA7060AP (N250:AEP, IT, G)	
IC3	8-759-176-03	IC LA1835	
IC51	8-759-288-54	IC LC72130	
IC903	8-759-289-38	IC HA12195NT (D260/N250:CND, AEP, IT, G)	
IC903	8-759-289-39	IC HA12196NT (N250:E, MX, AR, AUS, PX)	
IC904	8-759-111-44	IC UPC4570C-1	
IC905	8-759-111-44	IC UPC4570C-1	
IC906	8-759-143-54	IC UPC1330HA	
IC1001	8-759-634-51	IC M5218AP (EXCEPT N250:AUS)	
IC1002	8-759-000-48	IC MC14052BCP	
IC1101	8-759-291-98	IC M62423FP	
IC1131	8-759-281-42	IC TC9210P	
IC1202	8-759-111-68	IC UPC1237HA	
IC1341	8-759-820-13	IC L78MR06	
IC1351	8-759-288-53	IC LA5617	
IC1381	8-759-802-22	IC L780S10	
IC1391	8-759-604-86	IC M5F7807	
IC1501	8-759-333-93	IC TMP87CP64F-6254	
IC1502	8-759-917-18	IC SN74HCU04AN	
< IFT >			
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
< JACK >			
* J1001	1-580-691-11	JACK, PIN 2P (PHONO or VIDEO)	
< COIL >			
L1	1-407-500-00	INDUCTOR 4.7mH (N250:AEP)	
L1	1-410-688-31	INDUCTOR 1.5mH (D260/N250:CND, E, IT, G, MX, AR, AUS, PX)	
L2	1-410-524-41	INDUCTOR 220uH (N250:AEP)	
L3	1-410-316-11	INDUCTOR 1uH (N250:AEP)	
L31	1-414-142-11	INDUCTOR 1uH (N250:AEP, IT, G)	
L701	1-410-780-11	INDUCTOR 27mH	
L801	1-410-780-11	INDUCTOR 27mH	
L901	1-414-223-11	INDUCTOR 470uH	
L1201	1-420-872-00	COIL, AIR-CORE (N250:AEP, IT, G)	
L1251	1-420-872-00	COIL, AIR-CORE (N250:AEP, IT, G)	
L1851	1-410-521-11	INDUCTOR 100uH	
L1852	1-410-521-11	INDUCTOR 100uH	
< FILTER >			
LPF1	1-239-597-11	FILTER, LOW PASS(D260/N250:CND, AEP, IT, G)	
LPF2	1-239-597-11	FILTER, LOW PASS(D260/N250:CND, AEP, IT, G)	

Ref.No.	Part No.	Description	Remark
< TRANSISTOR >			
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY (D260/N250:CND, E, MX, AR, AUS, PX)	
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY (D260/N250:CND, E, MX, AR, AUS, PX)	
Q3	8-729-230-99	TRANSISTOR 2SC2669-OY (D260/N250:CND, E, MX, AR, AUS, PX)	
Q4	8-729-230-99	TRANSISTOR 2SC2669-OY (D260/N250:CND, E, MX, AR, AUS, PX)	
Q5	8-729-422-57	TRANSISTOR UN4111	
Q6	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q7	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q8	8-729-900-80	TRANSISTOR DTC114ES (N250:AEP)	
Q9	8-729-900-80	TRANSISTOR DTC114ES (N250:AEP)	
Q10	8-729-900-80	TRANSISTOR DTC114ES (N250:AEP)	
Q11		TRANSISTOR UN4211 (N250:AEP)	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE (N250:E, MX, AR, AUS, PX)	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q904	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-900-89	TRANSISTOR DTC144ES	
Q909	8-729-900-65	TRANSISTOR DTA144ES	
Q1001	8-729-900-80	TRANSISTOR DTC114ES	
Q1002	8-729-900-80	TRANSISTOR DTC114ES	
Q1101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1131	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1151	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1181	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-900-63	TRANSISTOR DTA124ES	
Q1205	8-729-900-80	TRANSISTOR DTC114ES	
Q1206	8-729-900-80	TRANSISTOR DTC114ES	
Q1301	8-729-116-83	TRANSISTOR 2SD1616-K (N250:AEP, IT, G)	
Q1301	8-729-209-15	TRANSISTOR 2SD2012 (D260/N250:CND, E, MX, AR, AUS, PX)	
Q1302	8-729-209-15	TRANSISTOR 2SD2012 (N250:AEP, IT, G)	
Q1303	8-729-900-80	TRANSISTOR DTC114ES	
Q1321	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1361	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1362	8-729-900-80	TRANSISTOR DTC114ES	
Q1363	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1364	8-729-900-80	TRANSISTOR DTC114ES	
Q1801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1851	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1852	8-729-900-80	TRANSISTOR DTC114ES	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
< RESISTOR >						R56	1-249-417-11	CARBON	1K	5%	1/4W F (N250:AEP)
R4	1-249-402-11	CARBON	56	5%	1/4W F	R57	1-249-429-11	CARBON	10K	5%	1/4W (N250:AEP)
R5	1-249-411-11	CARBON	330	5%	1/4W	R58	1-249-417-11	CARBON	1K	5%	1/4W F
R6	1-247-863-91	CARBON	22K	5%	1/4W	R59	1-249-417-11	CARBON	1K	5%	1/4W F
R7	1-249-411-11	CARBON	330	5%	1/4W	R60	1-249-405-11	CARBON	100	5%	1/4W F
R8	1-249-411-11	CARBON	330	5%	1/4W F						
(D260/N250:CND, E, MX, AR, AUS, PX)						R61	1-249-423-11	CARBON	3.3K	5%	1/4W F
R9	1-247-863-91	CARBON	22K	5%	1/4W	R62	1-249-425-11	CARBON	4.7K	5%	1/4W F
R10	1-249-411-11	CARBON	330	5%	1/4W	R63	1-249-425-11	CARBON	4.7K	5%	1/4W F
R11	1-247-863-91	CARBON	22K	5%	1/4W	R64	1-249-425-11	CARBON	4.7K	5%	1/4W F
R12	1-249-411-11	CARBON	330	5%	1/4W	R65	1-247-807-31	CARBON	100	5%	1/4W
R13	1-249-411-11	CARBON	330	5%	1/4W						
(D260/N250:CND, E, MX, AR, AUS, PX)						R66	1-249-425-11	CARBON	4.7K	5%	1/4W F
R14	1-247-863-91	CARBON	22K	5%	1/4W	R71	1-249-423-11	CARBON	3.3K	5%	1/4W F (N250:AEP)
R15	1-249-405-11	CARBON	100	5%	1/4W F	R72	1-247-863-91	CARBON	22K	5%	1/4W (N250:AEP)
R16	1-249-442-11	CARBON	510	5%	1/4W	R73	1-249-425-11	CARBON	4.7K	5%	1/4W F (N250:AEP)
R17	1-249-403-11	CARBON	68	5%	1/4W F	R74	1-249-425-11	CARBON	4.7K	5%	1/4W F (N250:AEP)
R18	1-247-842-11	CARBON	3K	5%	1/4W						
R19	1-249-441-11	CARBON	100K	5%	1/4W	R75	1-249-425-11	CARBON	4.7K	5%	1/4W F (N250:AEP)
R20	1-249-429-11	CARBON	10K	5%	1/4W	R684	1-249-409-11	CARBON	220	5%	1/4W F (N250:E, MX, AR, AUS, PX)
R21	1-249-423-11	CARBON	3.3K	5%	1/4W F	R684	1-249-413-11	CARBON	470	5%	1/4W F (N250:E, MX, AR, AUS, PX)
R22	1-249-423-11	CARBON	3.3K	5%	1/4W F	R701	1-247-889-00	CARBON	270K	5%	1/4W
R23	1-249-426-11	CARBON	5.6K	5%	1/4W	R702	1-249-404-00	CARBON	82	5%	1/4W F
R24	1-249-426-11	CARBON	5.6K	5%	1/4W	R703	1-247-882-11	CARBON	130K	5%	1/4W
R25	1-249-429-11	CARBON	10K	5%	1/4W	R704	1-247-850-11	CARBON	6.2K	5%	1/4W
R26	1-249-429-11	CARBON	10K	5%	1/4W	R711	1-247-889-00	CARBON	270K	5%	1/4W
(N250:AEP)						R712	1-249-404-00	CARBON	82	5%	1/4W F
R40	1-249-399-11	CARBON	33	5%	1/4W F	R713	1-247-882-11	CARBON	130K	5%	1/4W
R41	1-249-429-11	CARBON	10K	5%	1/4W	R714	1-247-850-11	CARBON	6.2K	5%	1/4W
(N250:AEP)						R715	1-247-863-91	CARBON	22K	5%	1/4W
R42	1-249-429-11	CARBON	10K	5%	1/4W	R720	1-249-425-11	CARBON	4.7K	5%	1/4W F
(N250:AEP)						R721	1-249-429-11	CARBON	10K	5%	1/4W
R43	1-249-441-11	CARBON	100K	5%	1/4W	R722	1-249-431-11	CARBON	15K	5%	1/4W
R44	1-249-425-11	CARBON	4.7K	5%	1/4W F	R723	1-249-429-11	CARBON	10K	5%	1/4W
(N250:AEP)						R724	1-249-421-11	CARBON	2.2K	5%	1/4W F
R45	1-249-437-11	CARBON	47K	5%	1/4W	R725	1-249-428-11	CARBON	8.2K	5%	1/4W F
R46	1-247-903-00	CARBON	1M	5%	1/4W	R726	1-249-420-11	CARBON	1.8K	5%	1/4W F
(N250:AEP)						R727	1-247-863-91	CARBON	22K	5%	1/4W
R47	1-247-863-91	CARBON	22K	5%	1/4W	R728	1-249-417-11	CARBON	1K	5%	1/4W F
(N250:AEP)						R731	1-249-430-11	CARBON	12K	5%	1/4W
R48	1-249-437-11	CARBON	47K	5%	1/4W	R801	1-247-889-00	CARBON	270K	5%	1/4W
(N250:AEP)						R802	1-249-404-00	CARBON	82	5%	1/4W F
R50	1-249-401-11	CARBON	47	5%	1/4W F	R803	1-247-882-11	CARBON	130K	5%	1/4W
R51	1-249-417-11	CARBON	1K	5%	1/4W F	R804	1-247-850-11	CARBON	6.2K	5%	1/4W
R51	1-249-423-11	CARBON	3.3K	5%	1/4W F	R811	1-247-889-00	CARBON	270K	5%	1/4W
R52	1-249-417-11	CARBON	1K	5%	1/4W F	R812	1-249-404-00	CARBON	82	5%	1/4W F
R52	1-249-429-11	CARBON	10K	5%	1/4W						
R53	1-249-417-11	CARBON	1K	5%	1/4W F						
R53	1-249-429-11	CARBON	10K	5%	1/4W						
R55	1-249-429-11	CARBON	10K	5%	1/4W						

# MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R813	1-247-882-11	CARBON	130K 5% 1/4W	R958	1-249-417-11	CARBON	1K 5% 1/4W F
R814	1-247-850-11	CARBON	6. 2K 5% 1/4W	R1001	1-249-417-11	CARBON	1K 5% 1/4W F (N250:AEP, IT, G)
R815	1-247-863-91	CARBON	22K 5% 1/4W	R1002	1-249-422-11	CARBON	2. 7K 5% 1/4W (N250:AUS)
R820	1-249-425-11	CARBON	4. 7K 5% 1/4W F	R1002	1-249-417-11	CARBON	1K 5% 1/4W F (EXCEPT N250:AUS)
R821	1-249-429-11	CARBON	10K 5% 1/4W	R1003	1-249-427-11	CARBON	6. 8K 5% 1/4W (N250:AUS)
R822	1-249-431-11	CARBON	15K 5% 1/4W				
R823	1-249-429-11	CARBON	10K 5% 1/4W				
R824	1-249-421-11	CARBON	2. 2K 5% 1/4W F	R1003	1-249-437-11	CARBON	47K 5% 1/4W (EXCEPT N250:AUS)
R825	1-249-428-11	CARBON	8. 2K 5% 1/4W F	R1004	1-249-416-11	CARBON	820 5% 1/4W F (D260/N250:CND, AEP, IT, G)
R826	1-249-420-11	CARBON	1. 8K 5% 1/4W F	R1004	1-249-419-11	CARBON	1. 5K 5% 1/4W F (N250:E, MX, AR, PX)
R827	1-247-863-91	CARBON	22K 5% 1/4W	R1005	1-247-897-11	CARBON	560K 5% 1/4W (EXCEPT N250:AUS)
R828	1-249-417-11	CARBON	1K 5% 1/4W F	R1006	1-249-437-11	CARBON	47K 5% 1/4W (EXCEPT N250:AUS)
R831	1-249-430-11	CARBON	12K 5% 1/4W				
R903	1-249-413-11	CARBON	470 5% 1/4W F	R1007	1-249-409-11	CARBON	220 5% 1/4W F (EXCEPT N250:AUS)
R904	1-249-413-11	CARBON	470 5% 1/4W F	R1008	1-249-441-11	CARBON	100K 5% 1/4W (EXCEPT N250:AUS)
R905	1-249-413-11	CARBON	470 5% 1/4W F	R1009	1-249-409-11	CARBON	220 5% 1/4W F (N250:AEP, IT, G)
R906	1-249-413-11	CARBON	470 5% 1/4W F	R1011	1-247-863-91	CARBON	22K 5% 1/4W
R910	1-249-429-11	CARBON	10K 5% 1/4W (D260/N250:CND, AEP, IT, G)	R1012	1-247-863-91	CARBON	22K 5% 1/4W
R911	1-215-451-00	METAL	18K 1% 1/4W (D260/N250:CND, AEP, IT, G)				
R912	1-249-440-11	CARBON	82K 5% 1/4W	R1046	1-249-421-11	CARBON	2. 2K 5% 1/4W F
R913	1-247-862-11	CARBON	20K 5% 1/4W	R1047	1-249-417-11	CARBON	1K 5% 1/4W F
R915	1-249-429-11	CARBON	10K 5% 1/4W	R1049	1-249-441-11	CARBON	100K 5% 1/4W
R916	1-249-429-11	CARBON	10K 5% 1/4W	R1050	1-249-434-11	CARBON	27K 5% 1/4W
R917	1-247-864-11	CARBON	24K 5% 1/4W	R1051	1-249-417-11	CARBON	1K 5% 1/4W F (N250:AEP, IT, G)
R918	1-249-429-11	CARBON	10K 5% 1/4W				
R919	1-249-429-11	CARBON	10K 5% 1/4W	R1052	1-249-422-11	CARBON	2. 7K 5% 1/4W (N250:AUS)
R920	1-249-429-11	CARBON	10K 5% 1/4W	R1052	1-249-417-11	CARBON	1K 5% 1/4W F (EXCEPT N250:AUS)
R921	1-249-424-11	CARBON	3. 9K 5% 1/4W F	R1053	1-249-427-11	CARBON	6. 8K 5% 1/4W (N250:AUS)
R922	1-249-389-11	CARBON	4. 7 5% 1/4W F	R1053	1-249-437-11	CARBON	47K 5% 1/4W (EXCEPT N250:AUS)
R923	1-249-434-11	CARBON	27K 5% 1/4W	R1054	1-249-416-11	CARBON	820 5% 1/4W F (D260/N250:CND, AEP, IT, G)
R924	1-249-434-11	CARBON	27K 5% 1/4W				
R925	1-249-429-11	CARBON	10K 5% 1/4W	R1054	1-249-419-11	CARBON	1. 5K 5% 1/4W (N250:E, MX, AR, PX)
R926	1-249-389-11	CARBON	4. 7 5% 1/4W F	R1055	1-247-897-11	CARBON	560K 5% 1/4W (EXCEPT N250:AUS)
R931	1-215-905-11	METAL OXIDE	10 5% 3W F	R1056	1-249-437-11	CARBON	47K 5% 1/4W (EXCEPT N250:AUS)
R932	1-249-426-11	CARBON	5. 6K 5% 1/4W	R1057	1-249-409-11	CARBON	220 5% 1/4W F (EXCEPT N250:AUS)
R933	1-249-442-11	CARBON	510 5% 1/4W	R1058	1-249-441-11	CARBON	100K 5% 1/4W (EXCEPT N250:AUS)
R934	1-249-441-11	CARBON	100K 5% 1/4W				
R935	1-249-441-11	CARBON	100K 5% 1/4W	R1059	1-249-409-11	CARBON	220 5% 1/4W F (N250:AEP, IT, G)
R946	1-249-429-11	CARBON	10K 5% 1/4W				
R947	1-249-429-11	CARBON	10K 5% 1/4W				
R948	1-249-429-11	CARBON	10K 5% 1/4W				
R949	1-249-429-11	CARBON	10K 5% 1/4W (D260/N250:CND, AEP, IT, G)				
R950	1-249-429-11	CARBON	10K 5% 1/4W				
R951	1-249-429-11	CARBON	10K 5% 1/4W				
R953	1-249-429-11	CARBON	10K 5% 1/4W				
R954	1-249-417-11	CARBON	1K 5% 1/4W F				
R955	1-249-421-11	CARBON	2. 2K 5% 1/4W F				

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R1096	1-249-421-11	CARBON	2. 2K	5%	1/4W F	R1290	1-249-437-11	CARBON	47K	5%	1/4W
R1097	1-249-417-11	CARBON	1K	5%	1/4W F	R1298	1-249-385-11	CARBON	2. 2	5%	1/6W F
R1099	1-249-441-11	CARBON	100K	5%	1/4W						(N250:AEP, IT, G)
R1100	1-249-434-11	CARBON	27K	5%	1/4W	R1299	1-249-385-11	CARBON	2. 2	5%	1/6W F
											(N250:AEP, IT, G)
R1101	1-249-429-11	CARBON	10K	5%	1/4W	R1303	1-249-429-11	CARBON	10K	5%	1/4W
R1102	1-247-863-91	CARBON	22K	5%	1/4W	R1304	1-249-429-11	CARBON	10K	5%	1/4W
R1131	1-249-437-11	CARBON	47K	5%	1/4W						
R1133	1-249-429-11	CARBON	10K	5%	1/4W	R1311	1-249-423-11	CARBON	3. 3K	5%	1/4W F
R1134	1-249-437-11	CARBON	47K	5%	1/4W	R1312	1-249-381-11	CARBON	1	5%	1/4W F
											(D260/N250:CND, AEP, IT, G)
R1135	1-249-417-11	CARBON	1K	5%	1/4W F	R1313	1-249-381-11	CARBON	1	5%	1/4W F
R1151	1-249-429-11	CARBON	10K	5%	1/4W						(D260/N250:CND, AEP, IT, G)
R1152	1-247-863-91	CARBON	22K	5%	1/4W	R1316	1-249-393-11	CARBON	10	5%	1/4W F
R1181	1-249-437-11	CARBON	47K	5%	1/4W	R1321	1-249-421-11	CARBON	2. 2K	5%	1/4W F
R1183	1-249-429-11	CARBON	10K	5%	1/4W						
						R1322	1-249-435-11	CARBON	33K	5%	1/4W
R1184	1-249-437-11	CARBON	47K	5%	1/4W	R1341	1-249-417-11	CARBON	1K	5%	1/4W F
R1185	1-249-421-11	CARBON	2. 2K	5%	1/4W F	R1342	1-249-429-11	CARBON	10K	5%	1/4W
R1209	1-247-807-31	CARBON	100	5%	1/4W	R1355	1-249-417-11	CARBON	1K	5%	1/4W F
R1210	1-247-807-31	CARBON	100	5%	1/4W	R1361	1-249-421-11	CARBON	2. 2K	5%	1/4W F
R1211	1-247-807-31	CARBON	100	5%	1/4W						
						R1362	1-249-411-11	CARBON	330	5%	1/4W
R1212	1-247-807-31	CARBON	100	5%	1/4W	R1363	1-249-421-11	CARBON	2. 2K	5%	1/4W F
R1213	1-247-807-31	CARBON	100	5%	1/4W	R1364	1-249-393-11	CARBON	10	5%	1/4W F
R1214	1-247-807-31	CARBON	100	5%	1/4W	R1371	1-249-429-11	CARBON	10K	5%	1/4W
R1215	1-247-807-31	CARBON	100	5%	1/4W						(N250:AEP2, E, MX)
R1220	1-249-389-11	CARBON	4. 7	5%	1/4W F	R1515	1-247-863-91	CARBON	22K	5%	1/4W
					(N250:AEP, IT, G)						
R1221	1-249-389-11	CARBON	4. 7	5%	1/4W F	R1516	1-247-863-91	CARBON	22K	5%	1/4W
					(N250:AEP, IT, G)	R1525	1-247-863-91	CARBON	22K	5%	1/4W
R1222	1-249-409-11	CARBON	220	5%	1/4W F	R1535	1-247-863-91	CARBON	22K	5%	1/4W
R1223	1-249-409-11	CARBON	220	5%	1/4W F	R1536	1-247-863-91	CARBON	22K	5%	1/4W
R1226	1-215-889-00	METAL OXIDE	330	5%	2W F	R1538	1-247-863-91	CARBON	22K	5%	1/4W
					(N250:CND, AEP, IT, G)						
R1226	1-215-890-11	METAL OXIDE	470	5%	2W F	R1539	1-247-863-91	CARBON	22K	5%	1/4W
					(N250:E, MX, AR, AUS, PX)	R1540	1-247-863-91	CARBON	22K	5%	1/4W
						R1544	1-247-863-91	CARBON	22K	5%	1/4W
R1226	1-215-891-11	METAL OXIDE	680	5%	2W F (D260)	R1545	1-247-863-91	CARBON	22K	5%	1/4W
R1233	1-249-425-11	CARBON	4. 7K	5%	1/4W F	R1546	1-247-863-91	CARBON	22K	5%	1/4W
R1234	1-249-425-11	CARBON	4. 7K	5%	1/4W F						
R1235	1-249-435-11	CARBON	33K	5%	1/4W	R1552	1-247-863-91	CARBON	22K	5%	1/4W
R1236	1-249-441-11	CARBON	100K	5%	1/4W	R1554	1-247-863-91	CARBON	22K	5%	1/4W
						R1555	1-249-417-11	CARBON	1K	5%	1/4W F
R1237	1-249-429-11	CARBON	10K	5%	1/4W	R1556	1-249-417-11	CARBON	1K	5%	1/4W F
R1240	1-249-438-11	CARBON	56K	5%	1/4W	R1557	1-249-417-11	CARBON	1K	5%	1/4W F
R1241	1-247-791-91	CARBON	22	5%	1/4W						
R1244	1-249-421-11	CARBON	2. 2K	5%	1/4W F	R1558	1-249-423-11	CARBON	3. 3K	5%	1/4W F
R1248	1-249-385-11	CARBON	2. 2	5%	1/6W F						(N250:AUS)
					(N250:AEP, IT, G)	R1558	1-249-425-11	CARBON	4. 7K	5%	1/4W F
											(EXCEPT N250:AUS)
R1249	1-249-385-11	CARBON	2. 2	5%	1/6W F	R1559	1-247-863-91	CARBON	22K	5%	1/4W
					(N250:AEP, IT, G)						(N250:E, MX, AR)
R1270	1-249-389-11	CARBON	4. 7	5%	1/4W F	R1559	1-249-429-11	CARBON	10K	5%	1/4W
					(N250:AEP, IT, G)						(N250:AEP, IT, G)
R1271	1-249-389-11	CARBON	4. 7	5%	1/4W F	R1559	1-249-431-11	CARBON	15K	5%	1/4W
					(N250:AEP, IT, G)						(N250:AUS, PX)
R1272	1-249-409-11	CARBON	220	5%	1/4W F	R1560	1-247-863-91	CARBON	22K	5%	1/4W
R1273	1-249-409-11	CARBON	220	5%	1/4W F	R1561	1-247-863-91	CARBON	22K	5%	1/4W

**MAIN**

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## MAIN

## OPEN/UP SW

## PANEL

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
XT51	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)		C675	1-126-949-11	ELECT 220uF 20% 35V	
*****				< CONNECTOR >			
	1-638-731-11	OPEN/UP SW BOARD		CN601	1-750-420-11	CONNECTOR, FFC/FPC 15P	
	*****			< DIODE >			
	< CAPACITOR >			D530	8-719-987-63	DIODE 1N4148M	
C705	1-162-302-11	CERAMIC 0.0022uF 30% 16V		D531	8-719-987-63	DIODE 1N4148M	
	< SWITCH >			D532	8-719-987-63	DIODE 1N4148M	
S702	1-571-300-21	SWITCH, ROTARY (OPEN/UP)		D533	8-719-987-63	DIODE 1N4148M	
*****				D540	8-719-987-63	DIODE 1N4148M	
*	A-4371-913-A	PANEL BOARD, COMPLETE (D260/N250:CND)		D541	8-719-987-63	DIODE 1N4148M	
	*****			D542	8-719-987-63	DIODE 1N4148M	
*	A-4371-932-A	PANEL BOARD, COMPLETE (N250:AEP, IT, G)		D543	8-719-987-63	DIODE 1N4148M	
	*****			D600	8-719-987-63	DIODE 1N4148M	
*	A-4371-947-A	PANEL BOARD, COMPLETE (N:E, MX, AR, AUS, PX)		D601	8-719-987-63	DIODE 1N4148M	
	*****			D605	8-719-046-46	DIODE SEL5221S-TH8F (P-FILE)	
*	4-949-935-21	CUSHION (FL)		D606	8-719-046-46	DIODE SEL5221S-TH8F (DANCE/5)	
*	4-969-681-01	HOLDER, FL TUBE		D607	8-719-046-46	DIODE SEL5221S-TH8F (CLASSIC/4)	
	< CAPACITOR >			D608	8-719-046-46	DIODE SEL5221S-TH8F (JAZZ/3)	
C500	1-162-306-11	CERAMIC 0.01uF 20% 16V		D609	8-719-046-46	DIODE SEL5221S-TH8F (POPS/2)	
C501	1-162-306-11	CERAMIC 0.01uF 20% 16V		D610	8-719-046-46	DIODE SEL5221S-TH8F (ROCK/1)	
C502	1-124-261-00	ELECT 10uF 20% 50V		D614	8-719-046-35	DIODE SEL5921A-TH8F (TUNER/BAND)	
C503	1-124-257-00	ELECT 2.2uF 20% 50V		D615	8-719-046-35	DIODE SEL5921A-TH8F (PHONO or VIDEO)	
C504	1-162-303-11	CERAMIC 0.0033uF 20% 16V		D629	8-719-011-40	DIODE UZ-2, 7BSA-TA	
	< CAPACITOR >			D630	8-719-011-40	DIODE UZ-2, 7BSA-TA	
C505	1-162-303-11	CERAMIC 0.0033uF 20% 16V		< FLUORESCENT INDICATOR >			
C506	1-124-261-00	ELECT 10uF 20% 50V		FL601	1-517-341-11	INDICATOR TUBE, FLUORESCENT	
C507	1-124-257-00	ELECT 2.2uF 20% 50V		< IC >			
C508	1-162-294-31	CERAMIC 0.001uF 10% 50V		IC501	8-759-634-51	IC M5218AP	
C509	1-162-294-31	CERAMIC 0.001uF 10% 50V		IC502	8-759-634-51	IC M5218AP	
	< CAPACITOR >			IC602	8-749-923-43	IC GP1U57XB	
C511	1-124-257-00	ELECT 2.2uF 20% 50V		IC608	8-752-862-43	IC CXP82612-006Q	
C512	1-162-286-21	CERAMIC 220PF 10% 50V		< COIL >			
C513	1-162-286-21	CERAMIC 220PF 10% 50V		L671	1-410-521-11	INDUCTOR 100uH	
C515	1-124-257-00	ELECT 2.2uF 20% 50V		L672	1-410-521-11	INDUCTOR 100uH	
C601	1-126-177-11	ELECT 100uF 20% 10V		< TRANSISTOR >			
C602	1-162-282-31	CERAMIC 100PF 10% 50V		Q603	8-729-900-63	TRANSISTOR DTA124ES	
C603	1-126-177-11	ELECT 100uF 20% 10V				(D260/N250:CND, E, MX, AR, AUS, PX)	
C604	1-162-306-11	CERAMIC 0.01uF 20% 16V		Q604	8-729-900-63	TRANSISTOR DTA124ES	
C605	1-162-306-11	CERAMIC 0.01uF 20% 16V				(D260/N250:CND, E, MX, AR, AUS, PX)	
C606	1-126-177-11	ELECT 100uF 20% 10V		Q605	8-729-900-63	TRANSISTOR DTA124ES	
	< CAPACITOR >					(D260/N250:CND, E, MX, AR, AUS, PX)	
C607	1-162-306-11	CERAMIC 0.01uF 20% 16V		Q606	8-729-900-80	TRANSISTOR DTC114ES	
C609	1-126-177-11	ELECT 100uF 20% 10V				(N250:E, MX, AR, AUS, PX)	
C651	1-126-301-11	ELECT 1uF 20% 50V		Q607	8-729-422-57	TRANSISTOR UN4111	
C652	1-126-301-11	ELECT 1uF 20% 50V				(N250:E, MX, AR, AUS, PX)	
C671	1-164-159-11	CERAMIC 0.1uF 50V					

# PANEL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q614	8-729-900-63	TRANSISTOR DTA124ES (D260/N250:CND, E, MX, AR, AUS, PX)		R650	1-249-419-11	CARBON 1.5K 5% 1/4W F	
Q615	8-729-900-63	TRANSISTOR DTA124ES (D260/N250:CND, E, MX, AR, AUS, PX)		R651	1-247-811-31	CARBON 150 5% 1/4W F	
< RESISTOR >				R652	1-249-410-11	CARBON 270 5% 1/4W F	
R403	1-247-863-91	CARBON 22K 5% 1/4W		R653	1-249-408-11	CARBON 180 5% 1/4W F	
R404	1-247-863-91	CARBON 22K 5% 1/4W		R654	1-249-409-11	CARBON 220 5% 1/4W F	
R410	1-247-863-91	CARBON 22K 5% 1/4W		R655	1-249-411-11	CARBON 330 5% 1/4W	
R411	1-247-863-91	CARBON 22K 5% 1/4W		R656	1-249-413-11	CARBON 470 5% 1/4W F	
R412	1-247-863-91	CARBON 22K 5% 1/4W		R657	1-249-414-11	CARBON 560 5% 1/4W F	
R413	1-247-863-91	CARBON 22K 5% 1/4W		R658	1-249-416-11	CARBON 820 5% 1/4W F	
R473	1-247-863-91	CARBON 22K 5% 1/4W		R663	1-247-903-00	CARBON 1M 5% 1/4W	
R474	1-247-863-91	CARBON 22K 5% 1/4W		R664	1-247-807-31	CARBON 100 5% 1/4W	
R478	1-247-863-91	CARBON 22K 5% 1/4W		R665	1-247-807-31	CARBON 100 5% 1/4W	
R479	1-247-863-91	CARBON 22K 5% 1/4W		R666	1-247-807-31	CARBON 100 5% 1/4W	
R500	1-249-435-11	CARBON 33K 5% 1/4W		R667	1-247-807-31	CARBON 100 5% 1/4W	
R501	1-249-441-11	CARBON 100K 5% 1/4W		R668	1-247-807-31	CARBON 100 5% 1/4W	
R502	1-247-895-00	CARBON 470K 5% 1/4W		R669	1-247-807-31	CARBON 100 5% 1/4W	
R504	1-249-435-11	CARBON 33K 5% 1/4W		R670	1-247-807-31	CARBON 100 5% 1/4W	
R505	1-249-441-11	CARBON 100K 5% 1/4W		R673	1-249-411-11	CARBON 330 5% 1/4W	
R506	1-247-895-00	CARBON 470K 5% 1/4W		R674	1-249-411-11	CARBON 330 5% 1/4W	
R508	1-249-435-11	CARBON 33K 5% 1/4W		R675	1-249-411-11	CARBON 330 5% 1/4W	
R509	1-249-441-11	CARBON 100K 5% 1/4W		R676	1-249-411-11	CARBON 330 5% 1/4W	
R510	1-247-895-00	CARBON 470K 5% 1/4W		R677	1-249-411-11	CARBON 330 5% 1/4W	
R512	1-249-435-11	CARBON 33K 5% 1/4W		R678	1-249-411-11	CARBON 330 5% 1/4W	
R513	1-249-441-11	CARBON 100K 5% 1/4W		R680	1-249-411-11	CARBON 330 5% 1/4W	
R514	1-247-895-00	CARBON 470K 5% 1/4W		R681	1-249-411-11	CARBON 330 5% 1/4W	
R516	1-249-437-11	CARBON 47K 5% 1/4W		R687	1-247-807-31	CARBON 100 5% 1/4W	
R517	1-249-437-11	CARBON 47K 5% 1/4W		R688	1-247-807-31	CARBON 100 5% 1/4W	
R518	1-249-437-11	CARBON 47K 5% 1/4W		R689	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R519	1-249-437-11	CARBON 47K 5% 1/4W		R692	1-247-807-31	CARBON 100 5% 1/4W	
R609	1-247-863-91	CARBON 22K 5% 1/4W		R693	1-249-429-11	CARBON 10K 5% 1/4W	
R610	1-247-863-91	CARBON 22K 5% 1/4W		R699	1-247-863-91	CARBON 22K 5% 1/4W	
R611	1-249-419-11	CARBON 1.5K 5% 1/4W F		< VARIABLE RESISTOR >			
R612	1-247-811-31	CARBON 150 5% 1/4W		RV601	1-467-869-11	ENCODER, ROTARY (VOLUME)	
R613	1-249-410-11	CARBON 270 5% 1/4W F		< SWITCH >			
R614	1-249-408-11	CARBON 180 5% 1/4W F		S603	1-554-303-21	SWITCH, TACTILE (▲)	
R615	1-249-409-11	CARBON 220 5% 1/4W F		S604	1-554-303-21	SWITCH, TACTILE (▼)	
R616	1-249-411-11	CARBON 330 5% 1/4W		S605	1-554-303-21	SWITCH, TACTILE (DBFB)	
R624	1-249-419-11	CARBON 1.5K 5% 1/4W F		S606	1-554-303-21	SWITCH, TACTILE (SURROUND)	
R625	1-247-811-31	CARBON 150 5% 1/4W		S607	1-554-303-21	SWITCH, TACTILE (PHONO or VIDEO)	
R626	1-249-410-11	CARBON 270 5% 1/4W F		S616	1-554-303-21	SWITCH, TACTILE (◀)	
R627	1-249-408-11	CARBON 180 5% 1/4W F		S617	1-554-303-21	SWITCH, TACTILE (▶)	
R628	1-249-409-11	CARBON 220 5% 1/4W F		S618	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)	
R629	1-249-411-11	CARBON 330 5% 1/4W		S619	1-554-303-21	SWITCH, TACTILE (TUNING -)	
R630	1-249-413-11	CARBON 470 5% 1/4W F		S620	1-554-303-21	SWITCH, TACTILE (TUNING +)	
R631	1-249-414-11	CARBON 560 5% 1/4W F		S621	1-554-303-21	SWITCH, TACTILE (TUNING MODE)	
R632	1-249-416-11	CARBON 820 5% 1/4W F		S622	1-554-303-21	SWITCH, TACTILE (TUNING MEMORY)	
R637	1-249-419-11	CARBON 1.5K 5% 1/4W F		S623	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
R638	1-247-811-31	CARBON 150 5% 1/4W		S644	1-554-303-21	SWITCH, TACTILE (ROCK/1)	

# PANEL POWER AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
S645	1-554-303-21	SWITCH, TACTILE (POPS/2)		CN1204	1-764-331-11	PIN, CONNECTOR (PCB) (V TYPE) 8P	
S646	1-554-303-21	SWITCH, TACTILE (JAZZ/3)		< DIODE >			
S647	1-554-303-21	SWITCH, TACTILE (CLASSIC/4)		D1201	8-719-987-63	DIODE 1N4148M	
S648	1-554-303-21	SWITCH, TACTILE (DANCE/5)		D1202	8-719-987-63	DIODE 1N4148M	
S649	1-554-303-21	SWITCH, TACTILE (EQ MEMORY)		D1203	8-719-987-63	DIODE 1N4148M (D260)	
S650	1-554-303-21	SWITCH, TACTILE (P-FILE)		D1251	8-719-987-63	DIODE 1N4148M	
< VIBRATOR >				< IC >			
X601	1-567-819-11	VIBRATOR, CERAMIC (4MHz)		IC1201	8-749-900-24	IC STK-4162MK2 (D260)	
*****				IC1201	8-749-920-09	IC STK-4152MK2K (N250:E, MX, AR, AUS, PX)	
*	A-4377-808-A	POWER AMP BOARD, COMPLETE (D260)		IC1201	8-749-920-13	IC STK-4132MK2 (N250:CND, AEP, IT, G)	
*****				< TRANSISTOR >			
*	A-4371-959-A	POWER AMP BOARD, COMPLETE		Q1201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
*****				Q1251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
(N250:E, MX, AR, AUS, PX)				< RESISTOR >			
*	A-4371-977-A	POWER AMP BOARD, COMPLETE		R1201	1-249-417-11	CARBON 1K 5% 1/4W F	
*****				R1202	1-249-438-11	CARBON 56K 5% 1/4W	
(N250:CND, AEP, IT, G)				R1203	1-249-414-11	CARBON 560 5% 1/4W F	
< CAPACITOR >				R1204	1-249-438-11	CARBON 56K 5% 1/4W	
C1201	1-124-927-11	ELECT 4.7uF 20% 100V		R1205	1-249-425-11	CARBON 4.7K 5% 1/4W F	
C1202	1-164-075-11	CERAMIC 150PF 10% 50V		R1206	1-249-425-11	CARBON 4.7K 5% 1/4W F	
C1203	1-164-077-11	CERAMIC 220PF 10% 50V		R1207	1-249-425-11	CARBON 4.7K 5% 1/4W F	
C1204	1-124-126-00	ELECT 47uF 20% 10V		R1208	1-249-425-11	CARBON 4.7K 5% 1/4W F	
(D260/N250:CND, AEP, IT, G)				R1209	1-212-881-11	FUSIBLE 100 5% 1/4W F	
C1204	1-124-907-11	ELECT 10uF 20% 50V		R1210	1-208-602-11	WIREWOUND 0.22 10% 2W F	
(N250:E, MX, AR, AUS, PX)				R1211	1-249-417-11	CARBON 1K 5% 1/4W F	
C1205	1-124-910-11	ELECT 47uF 20% 50V		R1212	1-249-431-11	CARBON 15K 5% 1/4W	
C1206	1-124-122-11	ELECT 100uF 20% 50V		R1213	1-249-441-11	CARBON 100K 5% 1/4W	
C1208	1-124-916-11	ELECT 22uF 20% 63V		R1214	1-249-421-11	CARBON 2.2K 5% 1/4W F	
C1210	1-137-375-11	FILM 0.068uF 5% 50V		R1215	1-249-421-11	CARBON 2.2K 5% 1/4W F	
C1211	1-137-375-11	FILM 0.068uF 5% 50V		R1216	1-249-421-11	CARBON 2.2K 5% 1/4W F	
C1220	1-126-176-11	ELECT 220uF 20% 10V (D260)		R1217	1-249-421-11	CARBON 2.2K 5% 1/4W F	
C1220	1-124-443-00	ELECT 100uF 20% 10V (N250)		R1218	1-247-791-91	CARBON 22 5% 1/4W	
C1251	1-124-927-11	ELECT 4.7uF 20% 100V		R1219	1-247-791-91	CARBON 22 5% 1/4W	
C1252	1-164-075-11	CERAMIC 150PF 10% 50V		R1226	1-249-429-11	CARBON 10K 5% 1/4W (N250)	
C1253	1-164-077-11	CERAMIC 220PF 10% 50V		R1227	1-247-863-91	CARBON 22K 5% 1/4W (N250)	
C1254	1-124-126-00	ELECT 47uF 20% 10V		R1227	1-249-429-11	CARBON 10K 5% 1/4W (D260)	
(D260/N250:CND, AEP, IT, G)				R1228	1-247-880-11	CARBON 110K 5% 1/4W	
C1254	1-124-907-11	ELECT 10uF 20% 50V		(N250:E, MX, AR, AUS, PX)			
(N250:E, MX, AR, AUS, PX)				R1228	1-249-441-11	CARBON 100K 5% 1/4W	
C1255	1-124-910-11	ELECT 47uF 20% 50V		(D260/N250:CND, AEP, IT, G)			
C1256	1-124-122-11	ELECT 100uF 20% 50V		R1230	1-249-429-11	CARBON 10K 5% 1/4W	
C1260	1-137-375-11	FILM 0.068uF 5% 50V		R1243	1-249-383-11	CARBON 1.5 5% 1/6W F	
C1261	1-137-375-11	FILM 0.068uF 5% 50V		R1251	1-249-417-11	CARBON 1K 5% 1/4W F	
< CONNECTOR >				R1252	1-249-438-11	CARBON 56K 5% 1/4W	
CN1203	1-764-340-11	PIN, CONNECTOR (PCB) (L TYPE) 3P		R1253	1-249-414-11	CARBON 560 5% 1/4W F	
				R1254	1-249-438-11	CARBON 56K 5% 1/4W	



## POWER AMP

## POWER (A)

## POWER (B)

## STANDBY SW

## SW

## TABLE MOTOR

Ref.No.	Part No.	Description	Remark
R1255	1-249-425-11	CARBON	4.7K 5% 1/4W F
R1256	1-249-425-11	CARBON	4.7K 5% 1/4W F
R1257	1-249-425-11	CARBON	4.7K 5% 1/4W F
R1258	1-249-425-11	CARBON	4.7K 5% 1/4W F
R1259	1-212-881-11	FUSIBLE	100 5% 1/4W F
R1260	1-208-602-11	WIREWOUND	0.22 10% 2W F
R1261	1-249-417-11	CARBON	1K 5% 1/4W F
R1262	1-249-431-11	CARBON	15K 5% 1/4W
R1263	1-249-441-11	CARBON	100K 5% 1/4W
R1268	1-247-791-91	CARBON	22 5% 1/4W
R1269	1-247-791-91	CARBON	22 5% 1/4W
*****			
*	1-655-287-11	POWER (A) BOARD	*****
	1-533-217-31	HOLDER, FUSE	
< CAPACITOR >			
C1951	1-164-159-11	CERAMIC	0.1uF 50V
C1952	1-164-159-11	CERAMIC	0.1uF 50V
< FUSE >			
△F1901	1-532-350-00	FUSE (T4A 250V)	
		(N250:AEP, E, IT, G, MX, AR, AUS, PX)	
△F1901	1-576-108-11	FUSE (4A 125V) (D260/N250:CND)	
△F1902	1-532-350-00	FUSE (T4A 250V)	
		(N250:AEP, E, IT, G, MX, AR, AUS, PX)	
△F1902	1-576-108-11	FUSE (4A 125V) (D260/N250:CND)	
< RESISTOR >			
△R1901	1-217-637-00	FUSIBLE	1 5% 1/4W F
△R1902	1-219-122-91	FUSIBLE	0.33 5% 1/4W F
△R1903	1-219-122-91	FUSIBLE	0.33 5% 1/4W F
*****			
*	1-655-288-11	POWER (B) BOARD	*****
	1-533-217-31	HOLDER, FUSE (D260/N250:CND)	
< CONNECTOR >			
* CN1951	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P	(D260/N250:CND, AEP, E, IT, G, MX, AR, PX)
< FUSE >			
△F1903	1-576-107-11	FUSE (3.15A 125V) (D260/N250:CND)	

Ref.No.	Part No.	Description	Remark
< RESISTOR >			
R1900	1-202-725-00	SOLID	3.3M 10% 1/2W (D260/N250:CND)
< SWITCH >			
△S1911	1-570-046-21	SWITCH, VOLTAGE CHANGE (N250:E, AR, PX)	
*****			
*	1-654-626-11	STANDBY SW BOARD	*****
< RESISTOR >			
R633	1-249-418-11	CARBON	1.2K 5% 1/4W F
< SWITCH >			
S624	1-554-303-21	SWITCH, TACTILE (CLOCK ENTER/NEXT)	
S625	1-554-303-21	SWITCH, TACTILE (CLOCK SET)	
S642	1-554-303-21	SWITCH, TACTILE (SYSTEM POWER)	
*****			
*	1-654-628-11	SW BOARD	*****
< CAPACITOR >			
C935	1-164-159-11	CERAMIC	0.1uF 50V
C936	1-164-159-11	CERAMIC	0.1uF 50V
C937	1-164-159-11	CERAMIC	0.1uF 50V (D260/N250:CND, AEP, IT, G)
< CONNECTOR >			
CN951	1-506-469-11	PIN, CONNECTOR	4P
< RESISTOR >			
R959	1-249-417-11	CARBON	1K 5% 1/4W F (D260/N250:CND, AEP, IT, G)
< SWITCH >			
S951	1-692-786-11	SWITCH PUSH (2 KEY) (N250:E, MX, AR, AUS, PX)	
S951	1-692-785-21	SWITCH PUSH (3 KEY)	(D260/N250:CND, AEP, IT, G)
*****			
	1-638-729-11	TABLE MOTOR BOARD	*****
< CAPACITOR >			
C704	1-162-302-11	CERAMIC	0.0022uF 30% 16V

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# TABLE MOTOR

# TAPE FUNCTION

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN707	1-573-044-11	SOCKET, CONNECTOR 5P	
		< DIODE >	
D701	8-719-970-19	DIODE GP-1A521	
		< MOTOR >	
M701	A-4353-976-A	MOTOR ASSY (TABLE)	
		< RESISTOR >	
R701	1-249-416-11	CARBON 820 5% 1/4W F	
*****			
*	1-654-629-11	TAPE FUNCTION BOARD	
		*****	
		< DIODE >	
D603	8-719-046-35	DIODE SEL5921A-IH8F (TAPE)	
		< SWITCH >	
S629	1-554-303-21	SWITCH, TACTILE (TAPE)	
*****			
		MISCELLANEOUS	
		*****	
△7	1-569-007-11	ADAPTER, CONVERSION 2P (N250:PX)	
11	1-765-333-11	WIRE (FLAT TYPE) (15 CORE)	
* 107	1-452-538-11	MAGNET	
158	1-769-303-11	WIRE (FLAT TYPE) (29 CORE)	
167	1-654-751-11	PC BOARD, FLEXIBLE	
169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
△201	8-848-387-01	OPTICAL PICK-UP BLOCK (KSS-213BA/S-N)	
202	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
* CN415	1-568-942-11	PIN, CONNECTOR 4P	
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
△CNP19011-558-943-41		CORD, POWER (N250:E, MX, PX)	
△CNP19011-575-651-21		CORD, POWER (N250:AEP, IT, G, AR)	
△CNP19011-590-926-11		CORD, POWER (D260/N250:CND)	
△CNP19011-696-845-11		CORD, POWER (N250:AUS)	
D701	8-719-970-19	DIODE GP-1A521	
FL601	1-517-341-11	INDICATOR TUBE, FLUORESCENT	
△F1901	1-532-350-00	FUSE TIME LAG (T4A 250V)	
		(N250:AEP, E, IT, G, MX, AR, AUS, PX)	
△F1901	1-576-108-11	FUSE (4A 125V) (D260/N250:CND)	
△F1902	1-532-350-00	FUSE TIME LAG (T4A 250V)	
		(N250:AEP, E, IT, G, MX, AR, AUS, PX)	
△F1902	1-576-108-11	FUSE TIME LAG (4A 125V) (D260/N250:CND)	

Ref. No.	Part No.	Description	Remark
△F1903	1-576-107-11	FUSE TIME LAG (3.15A 125V)	
		(D260/N250:CND)	
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	
M701	A-4353-976-A	MOTOR ASSY, ROTARY	
M702	A-4353-974-A	MOTOR ASSY, LOADING	
M901	X-3362-377-1	MOTOR (WH) ASSY (REEL/CAPSTAN)	
S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
S3	1-571-736-11	SWITCH, LEAF (REC B)	
S4	1-571-736-11	SWITCH, LEAF (MOTOR A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY A)	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
S101	1-572-085-11	SWITCH, LEAF	
△S1911	1-570-046-21	SWITCH, VOLTAGE CHANGE	
		(VOLTAGE SELECTOR) (N250:E, PX, AR)	
△T901	1-427-687-11	TRANSFORMER, POWER (N250:AEP, IT, G)	
△T901	1-427-688-11	TRANSFORMER, POWER	
		(N250:E, MX, AR, AUS, PX)	
△T901	1-427-689-11	TRANSFORMER, POWER (N250:CND)	
△T901	1-427-921-11	TRANSFORMER, POWER (D260)	
*****			
		ACCESSORIES & PACKING MATERIALS	
		*****	
	1-467-988-11	COMMANDER, STANDARD (RM-S200L)	
		(D260/N250:CND, AEP, E, IT, G, MX, AR, AUS, PX)	
	1-501-374-11	ANTENNA, LOOP (N250:AEP, IT, G)	
	1-501-594-31	ANTENNA (FM) (N250:AEP, IT)	
	2-114-902-01	BAG, POLYETHYLENE, CONDUCTIVE	
*	3-376-136-01	CUSHION (HALF)	
	3-798-005-41	MANUAL, INSTRUCTION	
		(ENGLISH, FRENCH, SPANISH, PORTUGUESE) (N250:AEP)	
	3-798-005-51	MANUAL, INSTRUCTION	
		(GERMAN, DUTCH, SWEDISH, ITALIAN) (N250:AEP, IT, G)	
	4-937-945-01	PLATE (TRANSPORT), LOCK	
	4-941-762-01	COVER, BATTERY (for RM-S200L)	
		(D260/N250:CND, AEP, E, IT, G, MX, AR, AUS, PX)	
*	4-971-017-01	INDIVIDUAL CARTON (N250:AEP, IT, G)	
*	4-971-022-01	CUSHION (EXCEPT CND)	
*	4-973-139-01	CUSHION	
*****			
		*****	
		HARDWARE LIST	
		*****	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-682-560-04	SCREW +BVTT 4X6 (S)	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
#5	7-682-554-04	SCREW +B 3X25	
#6	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#7	7-682-961-01	SCREW +PSW 4X8	
#8	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#9	7-621-255-15	SCREW +P 2X3	
#10	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#11	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#12	7-623-921-01	RING, RETAINING, CAPSTAN	
#13	7-688-001-01	W 2, SMALL	
#14	7-621-775-20	SCREW +B 2.6X5	
#15	7-621-849-00	SCREW, TAPPING	
#16	7-685-534-19	+BVTP 2.6X8	